SHARED VALUES?: MEASURING VALUE DIFFERENCES BETWEEN CIVILIANS AND SOLDIERS

A Thesis

by

SCOTT LAWRENCE EFFLANDT

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

May 1998

19980421 083

Major Subject: Sociology

Major Scott L. Efflandt 2809 Broadmoor Bryan, TX 77802 (409) 776-9845

April 15, 1998

Defense Technical Information Center (DTIC) 8725 John J. Kingman Rd, Suite 0944 Ft Belvoir, VA 22060-6218

SUBJECT: Submission of master's thesis for filing

- 1. Enclosed is a copy of my master's thesis for filing at your agency, entitled "Shared Values?: Measuring the Value Differences of Civilians and Soldiers" (104 total pages). In sum it uses a 209 person sample to compare the values of soldiers to non-military college students and untrained Army recruits. My findings here indicate that all three groups have distinct value systems, with recruits' value systems as most dissimilar from the other two groups.
- 2. This project was completed at Texas A&M University towards fulfillment of a Master of Science Degree in Sociology, May 1998.
- 3. If I can be of further assistance please contact me at the above address until 15 May 1998. After that day I can be reached at:

Major Scott L. Efflandt United States Army Military Academy Behavioral Sciences and Leadership Department, Bldg 601 West Point, NY 10996

Mart

Sincerely,

SCOTŤL EFFLANDZ MAJ, AR

319-44-9480

SHARED VALUES?: MEASURING VALUE DIFFERENCES BETWEEN CIVILIANS AND SOLDIERS

A Thesis

by

SCOTT LAWRENCE EFFLANDT

Submitted to Texas A&M University in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Approved as to style and content by:

James Burk

(Chair of Committee)

Mark Fosset

(Member)

Nehemia Geva (Member)

_

Rogelio Saenz

(Head of Department)

May 1998

Major Subject: Sociology

ABSTRACT

Shared Values?: Measuring Value Differences Between

Civilians and Soldiers. (May 1998)

Scott Lawrence Efflandt, B.S., Southern Illinois University

Chair of Advisory Committee: Dr. James Burk

In recent times all branches of the military have come under increased public scrutiny in response to personnel behavioral and operational shortcomings. In response to this many within and outside of the military have attributed these problems to the absence of personal values among new service members that are congruent with the military's core values. If such a condition is true it changes the nature of America's civil-military relations. The relationship between a democracy and its military remains precarious by design. The latter must forgo valued freedoms in order to guarantee them for the former. Historically having a social representative military has ensured the military serves larger society, and not its own interest. Having established a large standing army America relied on national conscription to ensure social representation. The advent of the All Volunteer Force in 1973 marked a new reliance on the competition for manpower—between the military and industry, college, etc.—to guarantee adequate social representation.

This research stands as an exploratory effort to assess the degree of social representativeness of the military by measuring value difference between a convenience sample of soldiers, untrained recruits, and college students. My findings indicate first that

recent value problems are not random value conflicts but reflect systemic value differences. This conclusion substantiates military leaders' claims that new recruits do have values distinct from the services. However recruits' values are not representative of larger society either. Evidence suggests that self selection for Army service does not guarantee social representativeness. The values of those in the Army are closer to those of young adults who do not enter the military than to those who elect to join. Second, analysis here indicates that length of service in the Army, by itself, does not affect personal values. As a result future research may wish to address what other conditions of army service do affect values.

DEDICATION

For their life long support and assistance this work is dedicated to three important women in my life, my wife Ann, mother Barbara, and grandmother Elsie.

ACKNOWLEDGMENTS

It is an understatement to say that I have learned a lot by writing this thesis, both in terms of content as well as process. This certainly would not have been the case if not for the careful, diligent, and thorough work of my committee chair, Dr. James Burk, to whom I owe a great deal of thanks. Dr. Fosset and Geva likewise left an indelible mark on me and this work by contributing beyond their prescribed role. Additionally I need to recognize Mitch Peck who allowed me to take advantage of our friendship to utilize his expertise in compiling the data. Since this project studies the Army it certainly would not have reached this point without the assistance of those within it. In this regard two principals deserve special recognition, first Colonel Robert Cone who pointed me towards graduate school, and second, the unit commanders who provided me access to their fine soldiers.

TABLE OF CONTENTS

I	Page
ABSTRACT	iii
DEDICATION	v
ACKNOWLEDGMENTS	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
INTRODUCTION	1
THEORETICAL FRAMEWORK	4
Self Selection Social Learning How Value Differences Arise Research Hypotheses	7 9 10 13
METHODOLOGY	15
Sample Design Compiling the Data Methods of Analysis	15 17 24
ANALYSIS	· 31
CONCLUSION	35
REFERENCES	40
APPENDIX A: QUESTIONNAIRE	47
APPENDIX B: ROKEACH VALUE SURVEY COPYRIGHT RELEASE	65
APPENDIX C: TEXAS A&M HUMAN SUBJECTS BOARD APPROVAL	68

	Page
APPENDIX D: TABLES.	73
VITA	94

LIST OF TABLES

TABLE				
	1	Terminal Values Correlations	74	
	2	Instrumental Values Correlations.	. 77	
	3	Group Value Systems as Measured by Kendall's W	80	
	4	Index of Dissimilarities for Terminal Values	. 81	
	5	Index of Dissimilarities for Instrumental Values	82	
	6	Terminal Value Rankings by Group	83	
	7	Instrumental Value Rankings by Group	. 84	
	8	Kruskal Wallace Test for Terminal Value Differences Between Groups	. 85	
	9	Kruskal Wallace Test for Instrumental Value Differences Between Groups	s. 86	
	10	Mann Whitney Test for Two Groups Terminal Value Differences	87	
	11	Mann Whitney Test for Two Groups Instrumental Value Differences	. 88	
	12	OLS Regression Coefficients on Equality.	89	
	13	OLS Regression Coefficients on Family Security	89	
	14	OLS Regression Coefficients on National Security	90	
	15	OLS Regression Coefficients on Salvation.	90	
	16	OLS Regression Coefficients on True Friendship	91	
	17	OLS Regression Coefficients on Clean	91	

TA	BLE	age
	18 OLS Regression Coefficients on Honest	92
	19 OLS Regression Coefficients on Loving	92
	20 OLS Regression Coefficients on Obedient	93

•

.

INTRODUCTION

Sociologists studying the all volunteer force in the US have emphasized the importance of recruiting a military whose members are representative of society (Janowitz and Moskos 1979; Janowitz 1983; Burk 1996). They claim that a socially representative force contributes positively to civil-military relations in democratic societies because it ensures an identity (or close connection) between the military and the society it defends.

Recently, both the degree to which this identification has been achieved and the utility of achieving it have become matters of controversy. Some worry that the military too closely reflects the values of civilian society to the detriment of military effectiveness. This group believes that the erosion of military values occurs primarily through either of two mechanisms. In the first, military value change occurs as new recruits introduce civilian values into the service that are at odds with the military's "core values" (Sia 1993). By core values I mean those values judged most important to the military accomplishing its mission. In the second, military values erode as a result of the politicization of the officer corps (Weigley 1993, Buzzanco 1996). Others in civilian society worry that the military has become too isolated from civilian society. This isolation they believe is displayed by a growing gap between the military's values and culture and the values and culture that characterize mainstream society (Ricks 1997).

This thesis follows the style and format of the American Sociological Review.

¹ The Army states it has seven core values: honor, integrity, courage, loyalty, selfless service, duty (US Army 1997:4/7-4/9).

In either case, those who are concerned with the military's values cite several recent examples as reasons for their anxiety about the future. These value problem examples range from the failure of service members to maintain high standards in their personal behavior (e.g., with regard to sexual conduct) to operational deficiencies (e.g., with regard to duty performance) (Army Accepts 1997; Krulack 1996; Navy 1995; Newman 1997:25; Reimer 1997a, 1997b).

My purpose in this thesis is to consider whether there is a gap between military and civilian values. Oddly enough most evidence claiming there is a gap rests on anecdotal evidence, when systematic evidence is needed. This research project is an exploratory effort to meet that need. It seeks to determine if there is a difference in values between those within and outside of the military. The central question is whether the values of young men, age-eligible to serve in the military, are notably different from the values held by those who are presently serving. To answer this question I examine the values held by three target populations: (a) those in the army, (b) civilians who recently joined the military (new recruits), and (c) college students who are eligible to join the military but have not.

This research project, focused on answering the question of value differences, unfolds in four main parts. In the first section I establish a theoretical framework by integrating the work of others to define values, how values change, and the effect of values on social behavior. The second section explains the research methodology. It details how theoretical concepts were operationalized and measured. The third section, covers the analysis of the hypotheses developed in the theoretical framework section. I

conclude, in a fourth section, discussing the sociological significance of the analysis results.

THEORETICAL FRAMEWORK

"Values" is a difficult and contested concept that has been variously defined.² It is not our purpose to enter into a controversial discussion of this term. Rather we define values as standards that justify acts, thoughts, and judgments. This definition comes from the work of Milton Rokeach whose concept and study of values is well established in the literature. For Rokeach a value is "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach 1973:5). While many use the term value to describe an object's utility or monetary worth, Rokeach's application remains tied strictly to behavior. According to Rokeach values have a "transcendental quality" that guides "an actor's actions, attitudes and judgments" beyond immediate goals to more ultimate ends (1973:18).3 Three assumptions underlie this concept of values. First, the number of values are small and the same the world over. Second, a value's importance rests on a person's social, cultural, and personal experience. Additional experiences in any of these areas may change a value's importance. A value change is always significant. It represents a core rather than peripheral alteration. Finally, as a result of experience, people come to believe some values are more important than others. Consequently, the importance attached to

² In application the term values ranges from the ideas of religious fundamentalists for whom values are absolute and given by divine revelation to the ideas of Marxists for whom values are relative, appropriate only to certain social formations.

³ As defined, values are the determinants of attitudes, judgments, choices, and actions. (Rokeach 1979:3). Deviations and exceptions from strict adherence to values are explained by beliefs and attitudes which focus on a specific object or situation (Feather 1975; Medling and McCarrey 1981; Rokeach 1973:18).

any one value affects the relative importance attached to other values (Rokeach 1973:3). This process means each person develops an overall ranking of values, or what I will call a value system.

This last assumption requires elaboration. It is true, but not enough to say that a person's value system is anchored ultimately in experience. Value systems are mutable and linked to self perception (Rokeach 1973:216). They, may change within individuals as a result of value conflict. While values are, in some sense, natural and ideal, they are not necessarily mutually supportive. When they are not mutually supportive value conflicts arise. As shown by Stanley Milgram's (1965) study on obedience and authority, situations may force a person to choose between acting independently versus obediently. It is possible for competing values to remain equally valued if situations do not arise to provoke conflict. When this happens conflict between values is latent and resolution of the conflict will be delayed. As these value conflicts are resolved, either consciously or unconsciously, a hierarchical arrangement evolves into a value system. A value system is simply a rank ordering of values that serves to resolve social and personal conflict and direct the selection of alternatives (Cochrane 1974:337; Rokeach 1973:5; 1979:49). Continued social interaction perpetuates the process of value ranking and allows for a great degree of pluralism in society (Rokeach and Ball-Rokeach 1989).

Indeed, evidence for pluralistic value systems can be found down to the individual level. As Rokeach explains value systems are organized around two main objects. Some values—called terminal—refer to desirable end states. Other values—called instrumental—refer to modes of conduct. Terminal values are further categorized by

Rokeach as indicating a preference for either (a) personal/self centered end states or (b) social/society centered end states. In the former category, for instance, one finds values such as salvation or peace of mind while in the latter category one finds values that emphasize world peace and brotherhood. Rokeach believes that when a value's importance changes, a similar change will occur among the other values of that group. If someone gives more importance to one "personal" value, we should expect increased importance will be placed on the other "personal" values and that the relative importance of "socially" oriented terminal values will decrease. Instrumental values, like terminal values, are also further subdivided into two groups by Rokeach as either (a) moral values, that when violated bring feelings of guilt or pangs of conscious or (b) self-actualization values, that when violated bring feelings of inadequacy rather than guilt. The moral category contains values such as honesty or loving while the self-actualizing group contains values such as acting imaginatively or logically. A person may experience conflict with values found within either of these two groups (for example, between behaving honestly or lovingly) as well as between groups (for example, to act politely or critically). The types of instrumental values are not necessarily aligned with any specific group of terminal values. A person who emphasizes instrumental moral values may logically consider either social or personal terminal values as proper end states (Rokeach 1973:3-12).

Because individual value systems differ, there is no guarantee that the value systems of individuals within groups will be uniform. Nevertheless, it is also possible that individual value systems are socially organized. Members of certain groups may be more

likely to rank values similarly based upon common or shared experiences. That is to say members of a group may share an underlying standard for ordering values. When such a standard can be detected, then we say that the group's value system is coherent. If the value systems of any two groups are both coherent but different in their rankings of values, then we can say that the groups' value systems are both coherent and distinct.

Now, many believe the military maintains a distinct value system (Abbott 1988:192; Williams 1979:18) legitimized by the inherent risks of combat (Huntington 1985; Janowitz 1971:xv). Sustaining a distinct value system, based on a "core technology" to prepare for and fight wars, requires that members of the military forsake some of the freedoms and opportunities that the larger society values. Yet whether the military's value system is unique remains to be shown. Our problem empirically is to understand to what degree the value systems of those within the military are like or unlike the value systems of those in civilian society. The central task for theory is to say how a condition of different group value systems might arise. In general, two main hypotheses exist. One argues that acceptance of group value differences results from anticipatory socialization or self selection. The other argues that group value differences arise as a result of exposure to, and participation within, the group. Here values change towards greater congruency do to a social learning process.

Self Selection

Self selection theorists argue that individuals are attracted to certain social positions because they believe these positions offer them an opportunity to realize their values or, at a minimum, to reduce value conflict (Williams 1979:20; Laws 1976). The greater the

attraction to a position the more likely such persons will anticipate and emulate the modes of conduct they see as appropriate to that role (Rosenberg 1957:7). As a result of this process we would expect normative based organizations like the military—where legitimation is clearly tied to appeals to values—to display a strong sense of value identity and congruency among their members.⁴ Oddly, this expectation has not been much studied among those who join the military as enlisted personnel. Burk (1984) discusses normative appeals to military service, but does not directly address the role self selection plays.⁵ The role self selection plays among aspiring officers has been studied more extensively but the findings remain unclear (Goldich 1997:CRS-13; Stevens, Rosa, and Gardner 1994; Hammil, Segal, and Segal 1995). Nevertheless, the literature on occupational self selection as measured by the Rokeach Value Survey (RVS) shows that self selection based on a value orientation is an important factor affecting entry into nursing and psychology (Furnham 1988), social work (Koeske and Crouse 1981), and for crisis center volunteers (Mahoney and Pechura 1980).

By definition the all volunteer force competes for youth in the labor market against industry, colleges, and other institutions (Bachman, Segal, Freedman-Doan, and O'Malley, in press). The intensity of competition for youths varies with the unemployment rate, size of the cohort, size of the force and its personnel turnover rate. However intense competition requires that the AVF attempts to make itself attractive to a

⁴ In organizations whose normative basis is less relevant, we expect to find greater heterogeneity among the members.

⁵ The military is extraordinarily interested in the motivation and propensity behind enlistment as several studies look for this, most recently Bachman, et al. (in press).

wide range of youths who ultimately join the military for a variety of reasons (Battistelli 1997; Burk 1984; 1989). Whether the military is successful in this manpower competition depends ultimately on the character of those who join the service.

Social Learning

In contrast to self selection, social learning theorists argue that individuals often adopt a group's values as a result of occupying a role within the group. This process is especially prevalent in the work setting. In this context, value clusters form as a consequence of people's work within an organization. We expect that the greater one's immersion in a role the greater the effect on one's value system. Moreover, value changes associated with a person's work are not confined to the job; they affect non-work related behavior as well (Suleiman 1974; Kohn 1977:xxvi). Immersion is greatest perhaps for people who are members of "total" institutions—such as prisons or isolated boarding schools. Serving in the military is an equally intense occupational experience: The military is a "greedy institution" making many demands on a person beyond specific job performance (Coser 1974). As a result, if social learning theory is right, we can expect those who remain in the military to assume a distinctive value hierarchy from those in civilian society.

Studies done on persons immersed in a single institution (Cochrane 1974; Franke 1997:52; Welch 1990) demonstrate a clear institutional effect on values. In regards to the military, cross-sectional research on Army infantry officers has shown increased similarity in values corresponding to increases in rank and a corresponding decrease in value

⁶ As opposed to values forming from second hand exposure to an occupation (e.g. viewing movies about the military).

similarity with those in civilian society (Dyer and Hilligoss 1985:10). Additionally, when the military experience is intense, such as multiple combat tours in Vietnam, the institutional effects on values and beliefs continue after separation (Jennings and Markus 1975).

Of course, people may acquire their value priorities through either self selection, social learning, or some combination of the two. These processes are not mutually exclusive. Both methods indicate the main ways that value differences between the military and civilian society might grow large.

How Value Differences Arise

It is important not to oversimplify the process of value change, however. There are different views about how susceptible people are to value change at various times in the life course (Ingelhart 1990; Rokeach 1973; Kohn 1977; Erickson 1985). Without trying to resolve these issues here, it is possible to say that value systems are conditioned by a variety of variables relating to a person's social interaction. For simplicity I categorize these variables into one of three groups: social background, individual attributes, and group exposure.

Social background. Almost universally theorists accept that value systems begin forming during childhood. As children we learn from our parents how to view society, and almost "automatically" accept and internalize their view (Landis 1998:45; Berger and Luckmann 1966). In this way the personal experiences that shape parental values will indirectly affect their children's values. This happens because a child's value system

initially reflects an assimilation of a parent's value system. As a result we would expect parents who value social or selfless service to raise children with the same orientation.

While parents may have a direct effect on their children's values through instruction and role modeling, other theorists argue for the importance of indirect effects on values. For example Melvin Kohn's (1977) research indicates that our value orientation reflects a person's social class—as measured by occupational and educational attainment. Ronald Inglehart (1985; 1990) argues that the social economic status (SES) of one's family during childhood is the primary influence on personal value system development. Here the greater our childhood SES the more secure we felt growing up. The more secure we felt during youth, according to Inglehart, the more socially oriented we are as adults and less inclined to value physical security. Landis offers that the education of the parents and of the individual are both reliable indicators of class and SES (1998:324).

However not all theorists consider a person's standard of living as the primary factor affecting values. While these other researchers agree that childhood security does play a role in value development, they do not feel security is measured by wealth. Instead security reflects how well children are attached to, or integrated with, their neighborhood (Laumann 1973). Thus, greater security and homogeneity in values develops among children who change residence the least (Kasarda and Janowitz 1974).

In summary, parent's education level, residential stability during youth, and personal education attainment are offered as important background factors that determine a person's environment. A person's environment affects values indirectly by setting the stage for the types and quantity of conflicts that ultimately establishes value systems.

Individual attribute factors. Once we grow past early childhood, socialization outside the home plays an increasing role in our value development. In this less controlled environment our minority status is thought to have a large effect on us by naming the groups to which we belong (Landis 1998:183). A minority label is a social condition whose basis varies from culture to culture, but almost universally denotes a lower social status. Immigrants typically assume minority positions within their new host society. Studies of immigrants on three continents indicate that their degree of cultural assimilation (measured by host citizenship or language use) or group interaction (via schools or social clubs) affects their value system (Feather and Wasyluk 1973; Punetha, Giles, and Young 1987). Within the US minority status is easily identified by a single individual attribute—race—and has been tied to value differences (Rokeach 1974:231).

Group exposure factors. While some consider values fixed by early adulthood, others consider them subject to change throughout the life course. Rokeach contends that a variety of social or "group exposure" variables can modify our value systems and that changes are not limited by educational attainment, income, or age (Rokeach 1974, 1985). Although single events (such as the Cuban Missile Crisis) or social forces (like the Civil Rights movement) may affect value systems, such events may not affect all generations and cultures the same way (Helkama, Salminen and Uutela 1987). Those in their 20's and 30's appear to be more susceptible than those who are older to value change as a result of social forces (Penn 1977:296-299; Rokeach 1974:237). Marriage, another single event, is believed to reaffirm our values as we tend to marry those with similar values (Landis 1998:238).

In this social context of value change, occupation affects a person's values but not through social class or security. Rather employment status or church attendance represent variables that condition our values through repetitive exposure. As a result duration, frequency, and range of social exposure become the critical components of occupation and education rather than social standing (Laumann 1973; Rokeach and Ball-Rokeach 1989). Active participation separates group exposure variables from general environmental stimuli. Research on the value changes of persons who lived abroad indicates that social factors influence a person's values through active personal interaction; passive exposure to social factors does not change values (Moore 1976:253). Research Hypotheses

Relying on this theoretical background, we can return to our main question about possible value differences among soldiers, recruits, and college students and form the following specific hypotheses to guide our research.

Hypothesis 1: value system. Soldiers, recruits, and college students as separate groups will each have a coherent and distinct value system. The potential for members of each group to have similar experiences, unique from the other two groups, should develop a common criteria for ranking values within that group.

Hypothesis 2: self selection. The value systems of new recruits will be more like the value systems of soldiers than the value systems of college students. We would expect with an all volunteer army that those who elect to join the Army would seek this role in order to realize their values. The affects of anticipatory socialization would lead recruits

to begin adapting what they believe to be the Army's values before entrance into the institution.

Hypothesis 3: social learning. The distinctiveness found in soldiers' value system is the product of institutional exposure. People are expected to adopt the values of the group they interact with. In a greedy institution such as the Army, social interaction is confined almost exclusively to a single group. As a result, over time we would expect a soldier's value system increasingly to resemble other soldiers' value systems and less like the value systems of groups outside the Army.

METHODOLOGY

Before testing our hypotheses we have to examine what methods to employ. First, we look at the sample design and then, the process of data collection. Next, I describe how the variables were measured. Finally, I explain the analytical techniques used to test the hypotheses.

Sample Design

This research will use primary source data from a convenience sample comprised of three categories of people. The first category comprises college students at Texas A&M University. Recruitment for participation in this study came from introductory sociology courses and a marriage and family course. The introductory courses comprised first or second year college students from a cross section of departments and colleges seeking to fulfill a degree requirement. The marriage course, although slightly more advanced in the curriculum, rivals the introductory sociology courses in the diversity of students enrolled primarily because of its popularity. Texas A&M is considered by many within and outside of the institution to attract students who possess a more "traditional" orientation than many of their peers. Until the 1960's, the university was an all male military school, and today its Corps of Cadets continue to play a large role in campus life. As a result of this distinctions found here between college students and soldiers may underestimate the number and magnitude of differences between Army and the actual population.

The second sample population comprises active duty "delayed entry program" (DEP) soldiers, referred to here as recruits. People in this category represent those that have

enlisted for service in the active component of the Army but have not yet reported for formal training.⁷ This sample sought DEP's from ten recruiting stations covering approximately 4,400 square miles in east Texas (Rand-McNally 1996:95). This part of Texas spans a wide range of demographic characteristics such as; race, socioeconomic status, and population density. The locations of these recruiting stations range from small towns of under 25,000 people, recruiting from surrounding rural areas, to the Houston metropolitan area with a population of greater than 1.6 million (Commerce 1994:830).⁸

The third sample population comprises active duty Regular Army soldiers from three separate units: (a) an infantry company of the 1st Cavalry Division stationed at Ft Hood, (b) an armor brigade training team from 5th Army readiness group also at Ft Hood, and (c) a Cavalry Troop of the 3d Armored Cavalry Regiment (ACR), at Ft Carson, Colorado. Although all three units are located within the western United States the rotation policy of the Army provides each unit a high probability of having a wide variety of soldiers. However, because all measured Army units are combat arms they cannot represent the entire Army, if for no other reason than the absence of women. It is theorized, but untested that the values between those serving in the combat arms versus the combat support and combat service support branches are different as a result of their role on the battlefield (Ricks 1997; Sarkesian, Williams and Bryant 1995:162; Huntington

⁷ Such a condition requires a satisfactory completion of a physical exam, passing the Armed Services Vocational Aptitude Battery (ASVAB) test, selection of an occupational specialty (MOS), taking a sworn oath, and signing a legally binding contract.

⁸ New enlistees were sampled at ten recruiting stations in the following nine cities in Texas: Hunstville, Conrow, Humble, Lufkin, College Station, San Marcos, Austin, Round Rock, and Basstrop.

1985:12). If this theory is true then we would expect the presence of an Army value system to be most evident in samples such as this one which consist of those assigned to the combat arms units.⁹

Compiling the Data

The instrument behind the collection of this primary data is a 91 item questionnaire I developed and tested in a small pilot study. The instrument has three parts: (a) 18 background questions measuring social background, individual attributes, and group exposure, (b) a five point Likert rating for each of the 36 Rokeach values, and (c) a rank ordering of the 18 terminal and instrumental values (see Appendix A) (Rokeach 1973:5). Having collected the data I scrubbed and organized it for statistical analysis.

Instrument design and distribution. I developed the questions for my instrument from a review of the literature associated with the Rokeach Value Survey as well as other theoretical works on the formation of values. My intent underlying the survey's construction was to develop a stand alone instrument that could be completed in under 30 minutes. Once written, I sought criticism from other sociologists on the organization of the questionnaire. I further refined the instructions to the instrument based on the results obtained from a pilot study.

⁹ Armor, Infantry, Artillery, and Aviation units are considered combat arms. Air defense and engineer units are examples of combat support, while finance and quartermaster units perform combat service support functions.

¹⁰ Modified and reproduced by special permission of the Publisher, Consulting Psychologist Press, Palo Alto, CA 94303 from **Rokeach Value Survey** by Milton Rokeach. All rights reserved. Further reproduction is prohibited without the Publisher's written consent.

Concurrently with the development of the questionnaire, I obtained a copyright release for the Rokeach Value Survey and approval of the Texas A&M Human Subjects Board (see Appendices B and C). After obtaining permission from these two parties I then sought permission to administer the survey from the persons responsible for each of the populations comprising my sample. For the students I received permission from the two instructors involved. To survey the recruits I contacted and received permission from the United States Army Recruiting Command (USAREC) Fort Knox, Kentucky, and the concurrence of both recruiting battalion commanders. Before measuring the values of soldiers I obtained access to the unit from the brigade commander and each unit commander.

My method of administering the survey and my response rate varied by the population measured. In the case of students I distributed and explained the survey in the classroom before class began and asked them to turn in the completed surveys to the instructor at a later time. I surveyed four classes (over two terms), distributing a total of 190 questionnaires, received back 165 completed, for a response rate of 90 percent. To gather information on recruits I traveled to ten recruiting stations and briefed the station commander on the project. The station commander administered the surveys, and returned them to me in the enclosed stamped self addressed envelope. A total of 215 surveys were distributed in this manner, five stations returned a total of 81 questionnaires for a 38 percent return rate. ¹¹ For the final sample category I mailed the surveys and a

¹¹ Four recruiting stations returned surveys initially, a follow up phone call yielded results from a fifth station.

letter of instruction to each unit commander along with a stamped, self addressed envelope for returning the surveys. For this category a total 181 surveys were mailed, returns from all three locations totaled 122, for a 67 percent return rate. At the aggregate level 368 of 586 surveys were returned for an overall response rate of 67 percent.

In summary I distributed the survey to three populations that measured each respondent's values and several other factors believed to impact value formation. This process produced a sample of 368 respondents.

Coding the data. The respondents answered the first 55 questions of the questionnaire on a machine readable answer sheet while the last 36 questions, the ranking of the variables, required hand coding into a machine readable format. I checked for, and corrected, both machine and hand coding errors as the data was imported for analysis to SPSS 7.5 (1997) and Excel (Microsoft 1996).

From this point I systematically culled the sample pool to produce a more appropriate sample for testing my hypotheses. To begin with I separated from analysis those that had invalidated a table of the Rokeach Value Survey by failing to rank a value, rank it beyond the range of 1-18, or ranked two values as a tie. Next I deleted from the sample those respondents who had prior military experience since the enduring effects of military service on values remains unknown and the eight cases in my sample who had prior military experience proved to few to measure such affects. Finally, because resources did not permit an adequate stratified sampling of female soldiers and recruits, all female respondents were deleted from the sample and subsequently excluded from the analysis. This process yielded a final data set to 209 respondents—56 college students,

42 recruits, and 111 soldiers—although in some analysis missing data further reduced the sample size.

Variable Definition and Techniques of Measurement

As might be expected I employ three types of values in my analysis: (a) the dependent variable—values, (b) independent variables that operationalize self selection and social learning and, (c) control variables designed to account for other factors believed to influence value systems.

Dependent variable. I employed the Rokeach Value Survey (RVS) to quantify my dependent variable, values. This value survey comprises a list of 36 values organized into two tables. The first table contains terminal values while the second table contains instrumental values (Rokeach 1973:5). Each respondent ranked the values on both tables from 1-18 based on how important the given value is to them. The most important value received a score of 1, while the second most important received a 2, and so on. No ties were permitted within the table and only whole numbers were used. By utilizing several techniques Rokeach determined that 36 distinct types of values accounted for the most variance among the population while still maintaining a parsimonious measure (Rokeach 1974). Rokeach's conception of values reflects a pluralistic conception of society. As a result "parsimony" becomes a relative term. Even after limiting the number of terminal and instrumental values to 18 each, there are still 171 distinct value rankings, or systems, for each table of 18.

Several scientists have substantiated Rokeach's claim that these 36 values were unique by illustrating a low level of correlation between the values as measured in the

samples of their respective studies (McKernan 1982; Miethe 1985; Braithwaite and Law 1985). The value measurements in my sample also support this claim. The tau b correlation coefficients (see Appendix D, Tables 1 and 2) for both terminal and instrumental values shows a low correlation between the 18 values of each table. This supports Rokeach's theory that the 36 values are independent, distinct, and that further reduction in the number of values risks masking unique value system differences.

The RVS has proved to be a highly reliable instrument. Since its inception in 1968 the RVS has been applied in four national representative cluster sample surveys (Rokeach and Ball-Rokeach 1989) as well as countless other stratified samples selected by sociologists, psychologists, and political scientists in their research endeavors. Subject retest rates at the three to seven week interval are 0.51 - 0.88 for terminal values and 0.45 - 0.70 for instrumental values. At the 14 to 16 week mark, interval median retest correlation is 0.69 for terminal values and 0.61 for instrumental values (Rokeach and Ball-Rokeach 1989). Others who have replicated Rokeach's work report reliability rating of 0.74 for terminal values and 0.68 for instrumental (Mahoney and Pechura 1980:1009, see also Feather 1971; Homant 1969; Rokeach 1973). The RVS has been employed effectively in cross cultural research (Cochrane 1974, Feather and Cross 1975; Feather and Wasyluk 1973; Feather 1978, 1982; Giles, Ball, Gasiorek, and Korythowaska 1989; Hofstede and Bond 1984).

The second portion of my questionnaire also measured personal value systems by asking the respondent to rate the importance of each of the 36 items from the Rokeach Value Survey. These ratings used a five point Likert scale ranging from "Very (most)

Important" to "Not Important." Although this method of measuring values differed from the one designed by Rokeach it has been used by other researchers successfully (see Giles, et. al. 1989; Punetha, Giles and Young 1987; Young, Louw-Potgieter, Giles 1986; Hofstede and Bond 1984; Ng, et al. 1982). However within my sample the dispersion of ratings assigned to the values on a Likert scale proved minimal and insignificant. ¹² The fact that all values were rated high in all three groups reinforces Rokeach's position that all values are viewed as ideal and only when people are forced to make choices does a hierarchical arrangement evolve.

Independent variables. As stated earlier two competing explanations for value differences are under consideration in this research, self selection and social learning. To detect the presence of self selection by recruits into the all volunteer force requires a comparison of recruits' values to those of both college students and soldiers. If self selection occurs, then recruits' value systems should be less distinct from the value systems of soldiers as compared to the value systems of college students. According to social learning theory we expect that the length of time spent in a role (e.g. soldier) will cause value change. Therefore to assess the affects of social learning we measure the time spent in role as the number of months of active military service. For 19 soldiers the median length of service (38 months) was used as a substitute for missing data.

Control variables. The literature on values offers several plausible conditions, experiences or beliefs that may mitigate or affect value changes. In order to assess the

¹² The inability of this project to replicate others' findings on values using a Likert scale may result from my use of a 5 point scale where as previous scales ranged from 10-19 points.

value change associated with social learning or the presence of self selection we must control for these affects. By overlaying my data set on the theoretical ground covered in "how values differences arise" it seemed appropriate and plausible to introduce nine control variables. The following section explains how the control variables were operationalized. Each is addressed as it falls into one of the three general categories: social background, individual attributes, and group exposure.

In this data set four social background factors were measured. The first two were the military service of the respondent's father and mother. In each case a parent's military experience was represented by two dichotomous variables coded as 0 for no and 1 for yes. The next variable measures the longest time a respondent spent at a single residence before age 16. This is measured in years broken into five increments; 4 for < or = four years, 5 for five years, 6 for six years, 7 for seven years, 8 for > or = eight years. The final two variables of this category measured each parent's education level and recorded their attainment as follows: 0 for no high school diploma, 1 for graduated high school, 2 for some college education, 3 for a undergraduate college degree, and 4 for graduate training.

The variable ethnicity solely represents the effect of "individual attributes." It was measured as a dichotomous variable, coded 0 for white and 1 for non-white.

A total of three variables comprise the final, "group exposure" category. The first group exposure variable is a measure of combat experience coded as 1, for combat experience or 0 for none. The second group exposure variable represented the respondent's present marital status, coded as 0 for not currently or 1 for currently

married. The final variable of the group exposure category was a measure of religious practice. This variable had a response range of five; 0 for did not go to church, 1 for attending church < or = 1 time a month, 2 for twice a months, 3 for three times a month and, 4 for > or = four times a month.

No recruits or college students in the sample had military or combat experience and none were currently married. As a result these variables were not included in the their respective regression models.

Methods of Analysis

Testing my three hypotheses requires three distinct statistical applications. First I use the Kendall's W test to check for the presence of a common value system within each of the three groups. Second, if each group has a value system then we must consider whether the value systems of recruits is more similar to the value system of soldiers as hypothesis two predicts. I measure the differences between each group's value system by conducting an index of dissimilarity analysis. Regardless of the above findings, hypothesis three requires a third type of analysis. By using ordinary least squares regression (OLS) I test for the affects of military service (social learning) on personal values while controlling for other factors thought to influence values. The subsequent sections address the mechanics of these three kinds of analysis.

The presence of value systems. The generalization that the values of today's recruits are contrary to those of the military presupposes that each group has an actual value system. If no value system exists within these groups, then recent claims of value conflicts between recruits and the military could merely represent random effects. To test for a

value system I use the Kendall's coefficient of concordance: W. It provides a nonparametric measure of association among k sets of rankings found within a group (Siegel 1956:229). Although infrequently used today this test indicates the presence of a common criteria among the members of a group in how they rank items. Put differently, it indicates the presence of a value system within each group by showing what percentage of rankings are similar. The formula, expressed in equation 1 below, produces a coefficient that ranges between 0.0 and 1.0.

$$W = \frac{S}{\frac{1}{12}k^2(N^3 - N)}$$
 (1)

where

s = sum of squares of the observed deviations from the mean of Rj. In this context Rj represents the sum of ranks assigned to each value.

k =the number of rankings, or respondents.

N = number of entities or values being ranked.

Equation 2 is a test for significance of the W coefficient, and follows an approximate chi squared distribution. It allows us to reject the null hypothesis, that no intra-group agreement in value ranking exists.

$$\chi^{2} = \frac{s}{\frac{1}{12}k \ N(N+1)}$$
 (2)

Difference between value systems. Although the test of concordance demonstrates the extent to which a common criteria guides value rankings it does not tell us the dissimilarity between each groups' value system. For example we cannot be certain whether a 0.23 Kendall's W coefficient for group one reflects the same or different ranking criteria used in group two to produce a 0.30 coefficient. If we represent a single group's W coefficient as a proportional slice of a pie, we cannot be certain from this test whether another group's slice claims the same part of the pie or a different portion.

To determine the amount of overlap between each groups' value system we look at the difference in frequency distributions using an index of dissimilarities test. This measure shows what percentage of a group's value ranks have to change to mirror another's group's distribution. This test does not indicate what values must change or how much they must change, rather it shows the amount of disagreement between two groups by provide a percentage difference in the distribution. The coefficient can range from 0 to 1.0 and is computed as shown in equation 3.

$$\frac{\sum_{j=1}^{\left|\frac{P_{ij}}{n} - \frac{Q_{ij}}{m}\right|_{2}}}{18} \tag{3}$$

where

P = Group 1 and Q = Group 2.

i = the ranks assigned to a value and j = each of the ranked values.

n = the number of respondents in group 1 and m = the number of respondents in group 2.

18 = the number of ranked values.

Measuring social learning affects. The most common method of studying values with the RVS is to rank order each group's values based on their mean, or median, value and seek a substantive interpretation of the differences. In this research I attempt to move past this method of analysis to test specifically for the affects of social learning. Ordinary least squares (OLS) regression is a proven, robust, widely accepted and understood method of inferential statistics (Hamilton 1992). It efficiently allows us to measure the effects of a single independent variable while controlling for the effects of others. As a result it has the potential to test for the presence of social learning, provided the method's assumptions are met. But, before we can test for what causes the differences we must first determine precisely where the differences lie.

The test of concordance tells us that the values of each group are not random, but instead have a pattern that reflects a common ranking criteria. Furthermore the index of dissimilarities tells us the percent of difference between any two groups' overall value scheme. Yet neither of these tests tell us which specific values are significantly different or how different these values rank from one group to the next.

Specifically to identify the values whose rankings reflect distinct group differences I use both the Kruskal-Wallace and the Mann-Whitney tests. The Kruskal-Wallace equation tests ranks to determine whether k samples are from independent populations, at

a specified significance level; or whether the differences seen between groups reflect the random distribution of ranks drawn from the same population (Siegel 1956:184). This nonparametric test works with ranks rather than measurements and makes no underlying assumptions about the distributions (Hamilton 1996:279). The test's final coefficient follows a chi-squared distribution to indicate the values whose rankings are significantly different among the three sample populations.

Once the Kruskal-Wallace test identifies which values are different among the three populations I use the Mann-Whitney test to identify between which sample groups the significant differences in value rankings exists. The Mann Whitney test is also a nonparametric test, but it tests for the independence of value rankings between two, rather than k samples (Siegel 1956:116). The test is resistant to the effects of outliers and non-normal distributions. The equation coefficient is tested for significance against a standard normal distribution (Hamilton 1996:268).

Using these two nonparametric tests allows us to do two things: (a) it gives us a criteria to reduce the 36 values to a more manageable number and (b) it identifies where specific value differences lie so that we can then focus on what causes these differences. Although theoretically well grounded, the rank ordering of 36 values for use as a dependent variable is methodologically frustrating as well as cumbersome. The process of rank ordering these values by itself threatens the OLS assumptions of normal distribution and a continuos measure of the dependent variable. Because of these potential violations, caution is in order. However, given the exploratory nature of this research measuring with OLS for the presence of social learning based on values seems warranted, because as

a minimum such an application establishes a reference point for developing future value research.

Before running the OLS model on the values found significantly different, I took three preliminary steps. First, I checked for a non-normal distribution among the values. A frequency distribution skewed heavily towards either ranking extreme—high or low—disqualifies the value from analysis. Second, I recoded each respondent's rankings so that a value ranked as most important now scores 18, while the value selected as least important scores 1. In this format a positive regression coefficient corresponds to a value's increased rank importance. Lastly, I changed the ordinal rankings of variables to a more continuous measure by computing the z score for each respondent on the values found significantly different with the Kruskal-Wallace test. In this format a respondent's ranking of a single value is expressed as the number of standard deviations from the values' ranked mean (Hamilton 1996:155).

Finally, the model specified by the "variable definition" section is used in an OLS regression for each of the values found to be ranked significantly different. This single equation is run three times for each value considered, each iteration uses one of the three sample groups. The F-test result (shown in the OLS tables as ANOVA F) indicates the level of certainty that the independent variable coefficients in the regression equation do in fact correspond to changes in the dependent variable. The adjusted R squared (noted in the tables as adj R2) indicates the percentage of variance present in the model that is accounted for by the independent variables specified, after a correction for the number of independent variables. The T value for each independent variable indicates the level of

certainty that we have that the effects seen in the sample do mirror those found in the actual population, as they relate to a given independent variable (Hamilton 1996). This significance level is represented in the tables by an asterisk.

ANALYSIS

Analysis done using the Kendall's W test of concordance indicates the presence of a value system within all three groups for both terminal and instrumental values (see Table 3). Although by themselves the coefficients of concordance for each group are not large, given the potential dispersion of value rankings available using the RVS, any systemic pattern within a group is notable. Two patterns are apparent from this test. First, all three groups have more established criteria for ranking terminal values as compared to instrumental values. Second, college students have the greatest similarity in criteria used to rank values, followed by soldiers, and then recruits. This pattern holds for terminal as well as instrumental values. A test of significance provides us a p<.001 level of certainty for five of the six Kendall's W coefficients. For the sixth test the level of certainty for recruits dips slightly to p<.01 when assessing their instrumental values.

Having determined that each group does employ a common standard, to some degree, in ranking personal values we must assess whether this criteria is the same between the groups. The index of dissimilarities measures the difference in frequency distributions between any two values or systems (see Tables 5 and 6). By looking at the overall difference we see the cumulative difference between the groups. Three groups with two value systems each—terminal and instrumental—yields six comparisons.

In the case of terminal values, the soldiers' value systems are most similar to those of college students, while the value systems of recruits are most dissimilar to college students and almost equally distinct from soldiers. Moving to instrumental values, the

relationships and distances between the groups are similar to those found with terminal values. A chi squared test for independence allows us to say that each group's value system is different to a significance level of p<.001.

These findings are surprising since the presence of a value system among instrumental values is lower than the terminal systems of all three groups. As a result we can say that although instrumental value systems are less likely to be based on a common group criteria, the amount of difference between the instrumental values systems of each group remains as it was for terminal values. Also, surprisingly, among the three groups, college students and soldiers share the greatest commonality in values. Specifically, new recruits must change 33 percent of their terminal values and 32 percent of their instrumental value rankings to obtain a frequency distribution that matches present day soldiers, compared to the 28 and 29 percent change in the respective rank orderings between soldiers and civilians. Were this change to happen we could then expect the same level of concordance between the groups and within the groups to match.

Tables 6 and 7 show the terminal and instrumental value systems for each group based on a rank order established by each value's mean score. This common method of assessing value differences found with the RVS does not immediately permit a substantive interpretation. Other established value theories, such as Inglehart's postmaterialist shift (1990), fail to account for the disparity in value system differences seen here. Additionally a review of the frequency distributions shows groups have different patterns in the ranking of some values. As a result, any aggregate value rankings based on mean or median scores may mask important differences between the groups. Consequently we

turn to examining each value individually to ascertain where the significant differences exist between the groups.

The Kruskal-Wallace test indicates that the rankings of six terminal values—equality, family security, national security, salvation, true friendship, world of beauty—do vary significantly according to sample group membership (see Table 8). Also four instrumental values (see Table 9) differ significantly by group—clean, honest, loving, obedient. In total 10 of 36 values are ranked significantly different based on group membership. The Mann-Whitney test refines the finding of 10 value differences by showing where the differences lie (see Table 10 and 11). For some values, such as national security, there is a three way difference in how the value is ranked; while in other cases, such as family security the difference lies solely between recruits and soldiers.

These statistical applications have identified 10 values that are significantly different. Now the question becomes why are they ranked differently? A review of the boxplots gives reason to discard world of beauty from further analysis since all three sample groups ranked it extremely low resulting in an extreme positive skew. As a result nine values remain for OLS regression: equality, family security, national security, salvation, true friendship, clean, honest, loving, obedient.

Of the 27 regression equations computed (nine values x three sample groups), 10 equations proved significant as measured by an F-test, ANOVA value, below p.<05 (see Tables 12 through 20). Although the model used in each of these 10 significant equations explains only a small amount of the total variance seen in the population, as measured by the adjusted R2, some significant findings are evident. Looking just at the variables found

significant within the 10 significant regressions we see the following: Among students, being a minority increases the ranking of equality. Soldiers who are married rank family security higher.¹³

On the value of national security the findings indicate significant variables with inconsistent affects across groups. Recruits rank national security lower when non-white, while the ranking of national security among soldiers increases with church attendance and marriage. Minority recruits and recruits who attended church more frequently ranked salvation higher than others. In contrast the more recruits enjoyed residential stability as youths the less likely they were to rank salvation high. Also for soldiers, salvation is positively affected by increased church attendance. For students a father's military experience has a positive relationship to the importance assigned to the value clean, while for soldiers ethnicity and a father's education have a positive affect. A review of the value loving shows that only analysis done with students provides significant independent variable results, as positively affected by father's military experience.

¹³ The distribution of soldiers' ranking of family security shows a strong negative skew.

CONCLUSION

This exploratory research project yields four primary findings. First, US Army soldiers hold a distinct and coherent value system, different from civilian society. Whether this condition is good or bad depends on one's perspective. Regardless of whether this difference exists because of social learning or self selection, it indicates the potential for a rift between American society and the military that protects it. Additionally we find in this research greater agreement in all groups on the ranking of terminal values than we find among the groups for their ranking of instrumental values. This would lead us to predict greater intra-group agreement on what objectives to achieve but less agreement on how to achieve them.

Second, the comparison of each group's value system (terminal and instrumental) shows us that they are significantly different from one another. It was expected that the Army's value system would be farthest removed from civilian society—represented by college students. The values of recruits were expected to range between those of college students and the Army's based on the presence of self selection or anticipatory socialization. However the data from this study do not support that expectation. Specifically the overall value system of the Army is closer to that of college students than it is to the value system of new recruits. As measured by the index of dissimilarities, recruits stand almost equal distance from both college students and the Army. This pattern holds for both terminal and instrumental values. Because recruits do have a distinct and coherent value system we can say they do self select for the Army. However

such self selection does not favor the Army. This study indicates that the values held by new recruits neither favor the Army nor represent larger society.

Third, this research demonstrates that although there are significant differences in value systems and specific values for each group, the reasons for these differences are not easily distinguished. No category of independent variables modeled here consistently explains a value's ranking. Notable by its absence, military service has no significant effect on any value's ranking. Although inconsistency in the effects of independent variables on values remains methodologically frustrating, the condition seems plausible. For example we may expect church attendance to influence positively the importance assigned to the value of salvation. Yet at the same time we have no simple way of predicting how the increased importance assigned to salvation will change the rankings of the other 17 values. Such a wide dispersion of effects on values adds further support to Rokeach's endorsement of a pluralistic society whose value rankings are mitigated by many factors.

Finally, but perhaps most important for an exploratory project, we have demonstrated that it is possible to measure and compare the value systems of different groups. While there is always room for improvement, this work provides a means to assess claims that the military is socially isolated. By laying the groundwork for identifying social groups by their value systems, this study opens the door for longitudinal research about the causes and significance of value differences that separates the military from civilian society.

In sum, the findings of this report substantiate the claims of military leaders, that today's recruits have value systems that are different from those of the service; but they are wrong to believe that recruits' values are those of larger society. The value system of recruits are not those of wider society. At most they reflect the values of a specific subgroup drawn to military service. Indeed the values of soldiers are more like those of college students than their new recruits. These results provide strong support for the presence of self selection into the all volunteer force (AVF). What induces those with values distinct from both the Army and their civilian peers to enlist remains an unanswered question. Further research may determine whether this results from Army recruiting efforts or other social factors. Yet caveats are in order here. The high level of congruence in value systems between the military and college students may reflect a bias in my sample. The "traditional" orientation of A&M students may not represent the value system of college students across the country. Additionally, the finding of value similarity between soldiers and college students may come from the possibility that the previously larger AVF did ensure some degree of social representativeness within the Army. If this is the case, we could expect this similarity to decline in the future as the Army downsizes and smaller recruiting cohorts progress through the ranks.

Finally, we may reflect briefly on the policy implications of this research. Obviously the military would prefer to recruit those with values similar to its own. So why does it seem not to do so? It seems plausible that the Army today could enlist only those with compatible value systems. It needs to recruit fewer people and as a result it could be more selective along the value dimension. However there are reasons why this is not so easily

done. A strong US economy and changing demographics result in a smaller available manpower pool. These conditions make it difficult for the military to be highly selective. They also increase the potential for young people to select other alternatives to military service independent of the Army's preferences. Ironically the Army may even amplify these funneling processes as it motivates recruits to join the Army for monetary benefits rather than from a sense of normative commitment. 14 The level of competition for personnel within the labor market may prevent the Army from limiting recruitment to those with socially representative or institutionally similar values. If so, we would expect greatest institutional value conflict to be found in the service with the highest manpower demand (e.g., the Army) and the lowest institutional value conflict in the service with the smallest manpower demand (e.g., the Marines) (Ricks 1997). In any case the military's ability to change recruits' values will determine whether its institutional values drift towards those of socially distinct recruits or whether the military can maintain its current value position close to the larger society. If further research substantiates this exploratory work, then society's continued reliance on the military's adaptation to the labor market may no longer be sufficient to ensure social representativeness within the military and prevent a widening gap between the two parties 15

¹⁴ This argument follows the Institutional versus Occupational (I/O) model developed by Charles Moskos (1988). At one end of this continuum lies the pure institution motives typifying a military profession – acting as a community to serve a larger cause. Legitimacy comes from norms that "transcend individual self interest in favor of a presumed higher good" (Moskos 1988:16). Lying at the other end is the occupation characterization. The occupation perspective is anchored in the market place where things are assessed strictly in terms of cost and benefits (Moskos 1988:19).

¹⁵ Traditional factors, such as parental military experience, do affect values but may have a negative or mitigating affect on values that support normative behavior such as enlisting. A review of the regression equations shows that a father's military experience has a positive affect on the ranking of being loving

Again, caveats are in order. Due to the cross sectional nature of the data, it remains unknown whether the level of self selection by recruits today is more or less than the amount of self selection present with previous cohorts. If the value differences measured here are unchanged from previous cohorts *but* there is an increase in value-related problems, then the Army must access how its current indoctrination and training methods differ from those in the past. If the differences in values seen here are not new, then why are the military's induction methods no longer producing the same degree of value change? Some believe, for instance, that initial military training no longer has the same effect on values because of "gender norming" and pressure for a high pass rate has corrupted the process (Leo 1997, Thompson 1997).

Yet if this disparity in values between new recruits and soldiers is new, then the Army must assess the adequacy of its screening and induction training methods (Newman 1996; Ricks 1997). The absence of any significant effect from the variable "length of service" on any of the 10 values tested demonstrates that value change is not an obvious result from simple exposure to the institution. If social learning about values does occur, it results from processes beyond (or more subtle than) the number of months of service. This fact is not lost on the military which is aggressively pursuing value change on a variety of fronts with actions ranging from redesigned efficiency reports to increases in the length of basic training (Ethics 1996; Fleet 1996; Gilmore 1997; Mikos 1996; Kreisher 1996).

and clean. Yet, of the 113 respondents whose fathers had military experience, the smallest proportion is found among new recruits.

REFERENCES

- Abbott, Andrew. 1988. The System of Professions. Chicago, IL: University of Chicago Press.
- "Army Accepts 'Scathing Indictments' About Sexual Harassment." 1997. CNN. 11 September. http://cnn.com/us/9702/12/.
- Bachman, Jerald, David Segal, Peter Freedman-Doan, and Pat. O'Malley. in press. "Military Propensity and the Propensity-Enlistment Relationship." Armed Forces and Society.
- Battistelli, Fabrizio. 1997. "Peacekeeping and the Postmodern Soldier." Armed Forces and Society, 23(3):467-484.
- Berger, Peter and Thomas Luckmann. 1966. *The Social Construction of Reality*. Pp. 53-68. Garden City, NY: Doubleday.
- Braithwaite, V. and H. Law. 1985. "Structure of Human Values: Testing the Adequacy of the Rokeach Value Survey." *Journal of Personality and Social Psychology*, 49, (1):250-263.
- Burk, James. 1984. "Patriotism and the All Volunteer Force." Journal of Political and Military Sociology, 12(2):229-241.
- ——. 1989. "National Attachment and the Decline of the Mass Armed Force." *Journal of Political and Military Sociology*, 17:65-81.
- ——. 1996. "Recent Trends in Civil-Military Relations." *The Tocqueville Review/La Revue Tocqueville*, 17(1):83-106.
- Buzzanco, Robert. 1996. Masters of War. Cambridge, MA: Cambridge University Press.
- Cochrane, Raymond. 1974. "The Impact of a Training School Experience On The Value Systems Of Young Offenders." *British Journal of Criminology*, 14(4):336-344.
- Commerce, US Department of 1994. County and City Data Book, 12th Edition. Washington, DC: Bureau of Census.
- Coser, Lewis. 1974. Greedy Institutions: Patterns of Undivided Commitment. New York, NY: Free Press.

- Dyer, Fredrick and Richard Hilligoss. 1985. A Comparison of the Values of Highly Successful Senior Field Grade Infantry Officers with Those of Company Grade Infantry Officers and Civilians, Research Note 85-84. Ft. Benning, GA: Army Research Institute.
- Erickson, Erik. [1950] 1985. Childhood and Society. New York, NY: W.W. Norton and Co.
- "Ethics Training for Marine Recruits." 1996. News Release 6-96. San Diego, CA: Marine Corps Recruit Detachment Public Affairs Office.
- Feather, N. 1971. "Test-Retest Reliability of Individual Values and Value Systems." Australian Psychologist, 6:181-188.
- —. 1975. "Values and Income Level." Australian Journal of Psychology, 27(1):23-29.
- ——. 1978. "Value Importance and Age." European Journal of Social Psychology, 7(2):241-245.
- ——. 1982. "Reasons for Entering Medical School in Relation to Value Priorities and Sex of Students." *Journal of Occupational Psychology*, 55(2):119-128.
- Feather, N. and D. Cross. 1975. "Value System and Delinquency: Parental and Generational Discrepancies in Value Systems for Delinquent and Non-delinquent Boys." *The British Journal of Social and Clinical Psychology*, 14(2):117-129.
- Feather, N. and G. Wasyluk. 1973. "Subjective Assimilation among Ukrainian Migrants: Value Similarity and Parent-Child Differences." *The Australian and New Zealand Journal of Sociology*, 9(1), Feb., 16-31.
- "Fleet Marine Force Manuel (FM) 1-0." 1996. Core Value Training for Marine Recruits. Received from MCRD Public Affairs, fax no. 5241369, 02 April.
- Franke, Volker. 1997. "Warriors for Peace: The Next Generation of U.S. Military Leaders." Armed Forces and Society, 24:33-58.
- Furnham, Adrian. 1988. "Values and Vocational Choice: A Study of Value Differences in Medical Nursing and Psychology Students." Social Science and Medicine, 26(6):613-618.
- Giles, Howard, Peter Ball, Barbara Gasiorek, Margaret Korytkowska, and Louis. Young. 1989. "Ethnic Identification, Language, and Values: The Case of Polish Émigrés." Journal of Multilingual and Multicultural Development, 10(2):107-116.

- Gilmore, Gerry 1997. "Panels: Army to Re-emphasize Leadership Principles." Army News Service. 11 September. Washington, DC: United States Army Public Affairs.
- Goldich, Robert. 1997. "The DOD Service Academies: Issues for Congress." Congressional Research Service Report for Congress 97-217 F.
- Hamilton, Lawrence. 1992. Regression with Graphics. Belmont, CA: Duxbury Press.
- —. 1996. Data Analysis for Social Scientists. Belmont, CA: Duxbury Press.
- Hammil, John, David Segal, and Mady Wechsler Segal. 1995. "Self-Selection and Parental Socioeconomic Status as Determinants of the Values of West Point Cadets." *Armed Forces and Society* Fall: 103-15.
- Helkama, Klaus, Simo Salminen and Antti Uutela. 1987. "A World at Peace as a Personal Value in Finland: Its Relationship to Demographic Characteristics, Political Identification and Type of Moral Reasoning." Current Research on Peace and Violence, 10, (2-3):113-123.
- Hofstede, Geert, and Michael Bond. 1984. "Hofstede's Cultural Dimensions: An Independent Validation Using Rokeach's Value Survey." *Journal of Cross Cultural Psychology*, 15, (4):417-433.
- Homant, Robert. 1969. "Semantic Differential Ratings and Rank-Ordering of Values." Educational and Psychological Measurement, 29:885-889.
- Huntington, Samuel. [1957] 1985. The Soldier and the State. Cambridge, MA: Harvard University Press.
- Inglehart, Ronald. 1985. "Aggregate Stability and Individual-Level Flux in Mass Belief Systems: The Level of Analysis Paradox." *The American Political Science Review*, 79:97-116.
- ----. 1990. Culture Shift. Princeton, NJ: Princeton University Press.
- Janowitz, Morris. 1971. The Professional Soldier. New York, NY: Free Press.
- ----. 1983. The Reconstruction of Patriotism. Chicago, IL: University of Chicago Press.
- Janowitz, Morris and Charles Moskos. 1979. "Five Years of the All-Volunteer Force: 1973-1978." Armed Forces and Society, 5(2):171-218.
- Jennings, Kent and Gregory Markus. 1975. "The Effects of Military Service on Political Attitudes: A Panel Study." *The American Political Science Review*, 71:131-147.

- Kasarda, John and Morris Janowitz. 1974. "Community Attachment in Mass Societies." American Sociological Review, 39(3):328-339.
- Koeske, Gary and Mary Ann Crouse. 1981. "Liberalism-Conservatism in Samples of Social Work Students and Professionals." *The Social Service Review*, 55(2):193-205.
- Kohn, Melvin. [1969] 1977. Class and Conformity: A study in Values. Chicago, IL: University of Chicago Press.
- Kreisher, Otto. 1996. "Corps Aims to Strengthen Recruits Moral Fiber." San Diego Union Tribune, 01 April: A1.
- Krulack, Charles. 1996. The Marine Corps: The Best of Americas Values. USMC Home Page.
- Landis, Judson. 1998. Sociology: Concepts and Characteristics. Belmont, CA: Wadsworth.
- Laumann, Edward. 1973. Bonds of Pluralism. New York, NY: Wiley.
- Laws, Jerry. 1976. "Work Aspirations of Women: False Leads and New Starts." Signs: Journal of Women in Culture and Society, 1:33-49.
- Leo, John. 1997. "A Kinder, Gentler Army." U.S. News and World Report, 11 August: 14.
- Mahoney, John and Constance Pechura. 1980. "Values and Volunteers: Axiology of Altruism in a Crisis Center." *Psychology Reports*, 47:1007-1012.
- McKernan, James. 1982. "Value Systems and Race Relations in Northern Ireland and America." Ethic and Racial Studies, 5(2):156-174.
- Medling, James and Michael McCarrey. 1981. "Marital Adjustment over Segments of the Family Life Cycle: The Issue of Spouses' Value Similarity." *Journal of Marriage and Family*, 43(1):195-203.
- Miethe, Terrance. 1985. "The Validity and Reliability of Value Measurements." *The Journal of Psychology*, 119(5):441-453.
- Milgram, Stanley. 1965. "Some Conditions of Obedience and Disobedience to Authority." *Human Relations*, February: 57-76.
- Microsoft. 1996. Excel 7.0a. Boston, MA: Microsoft Corp.

- Mikos, John. 1996. "New Officer Evaluation Reporting System." In D. Reimer. CSA Weekly Summary No. 96-50. Released for distribution via E-Mail 18 DEC 96.
- Moore, Michael. 1976. "A Cross Cultural Comparison of Value Systems." *European Journal of Social Psychology*, 6(2):249-254.
- Moskos, Charles. 1988. "Institutional and Occupational Trends in Armed Forces." Pp. 15-26 in *The Military, More Than Just a Job*, edited by C. Moskos and F. Wood. New York, NY: Pergamon-Brassey.
- "Navy Admiral Punished for Adultery and Sex Harassment." 1995. CNN. 9 December. http://cnn.com/us/9512/09/.
- Newman, Richard. 1996. "The Few, the Proud, the Smart, the Moral." U.S. News and World Report. 16 December: 33-34.
- ——. 1997. "Correcting the Moral Compass." U.S. News and World Report, 10 March: 12.
- Ng, Seek, A. Akhtar-Hossain, Peter Ball, Michael Bond, K. Hayashi, Shirley Lim, Michael. O'Driscoll, D. Sinha, and K. Yang. 1982. "Values in Nine Countries." In *Diversity and Unity in Cross Cultural Psychology*, edited by R. Rath, H. Asthana, D. Sinha, & J. Sinha. Lisse: Swets & Zeitlinger.
- Penn, J. Roger. 1977. "Measuring Intergenerational Value Differences." Social Science Quarterly, 58(2):293-301.
- Punetha, Deepa, Howard Giles and Louis Young. 1987. "Ethnicity and Immigrant Values: Religion and Language Choice." *Journal of Language and Social Psychology*, 6(3-4):229-241.
- Rand-McNally Road Atlas. 1996. Skokie, IL: Rand-McNally Inc.
- Reimer, Dennis. 1997a. "Chief of Staff of the Army: 'Yellow,'" 97-02. Released for distribution via E-Mail, 13 JAN 1997.
- 1997b. Chief of Staff of the Army: Thoughts While Running. Released for distribution via E-Mail, 30 JUN 1997.
- Ricks, Thomas. 1997. The Making of the Corps. New York, NY: Scribner.
- Rokeach, Milton. 1973. The Nature of Human Values. New York, NY: Free Press.
- ——. 1974. "Changes and Stability in American Value System." *The Public Opinion Quarterly*, 38(2):222-238.

- ——.1979. "From Individual to Institutional Values: With Special Reference to the Values of Science." Pp. 47-70. Understanding Human Values. Edited by M. Rokeach. New York, NY: Free Press.
- Rokeach, Milton and Sandra Ball-Rokeach. 1989. "Stability and Change in American Value Priorities, 1968-1981." *American Psychologist*, 44(5):775-784.
- Rosenberg, Morris. [1957] 1980. Occupation and Values. New York, NY: Arno Press.
- Sarkesian, Sam, Jay Williams and Fred Bryant. 1995. Soldiers, Society, and National Security. Boulder, CO: Lynne Rienner Publishers.
- Sia, Richard. 1993. "Top Military Officers Favor Gays Staying in Closet." *The Baltimore Sun*, 3 February. http://www.cs.cmu.edu/afs/cs/usr/scotts/ftp/bulgarians/joint-chiefsban.html.
- Siegel, Sidney. 1956. Nonparametric Statistics for the Behavioral Sciences. New York, NY: McGraw-Hill.
- SPSS 7.5. 1997. SPSS Base for 7.5 for Windows. Chicago, IL: SPSS Inc.
- Stevens, Gwendolyn, Fred Rosa, Sheldon Gardner. 1994. "Military Academies as Instruments of Value Change." *Armed Forces and Society* Spring: 473-484.
- Suleiman, Ezra. 1974. Politics Power, and Bureaucracy in France: The Administrative Elite. Princeton, NJ: University Press.
- Thompson, Mark. 1997. "Boot Camp Goes Soft." Time Magazine, 4 August: 20-23.
- US Army" 1997. FM 22-100: Army Leadership, (as of 14 JUL 97, draft). Ft. Leavenworth, KA: Department of the Army.
- Weigley, Russell. 1993. "The American Military and the Principle of Civilian Control From McClellan to Powell." *The Journal of Military History*, 57(5):27-58.
- Welch, Michael. 1990. "The Value System of Incarcerated Embezzlers Compared to Other Inmates and the General Population." Journal of Offender Counseling, Services, and Rehabilitation, 15(2):155-176.
- Williams, Robin. 1979. "Changes and Stability in Value Systems: A Sociological Perspective." Pp. 15-46. *Understanding Human Values*. Edited by M. Rokeach. New York, NY: Free Press.

Young, Louis, Joha Louw-Potgieter, and Howard Giles. 1986. "Values as a Function of Ethnicity and Socio-Economic Status: A Cross National Study." Journal of Multilingual and Multicultural Development, 7(4):253-267.

APPENDIX A QUESTIONNAIRE

CONSENT FORM FOR DIVERGENCE OF VALUES STUDY

I understand that the purpose of this study is to learn more about the differing values of people and the factors that influence value development. I will be asked approximately 55 question concerning my background and the importance of various values to me, and then I will rank order these same values. This process will take approximately 30 minutes. I understand that the results are anonymous, and that neither my name nor any other identifying marks will be entered on the questionnaire or answer sheet. I am 1 of approximately 300 persons partaking in this research from either a civilian, military, college or non-college population.

I further understand that no attempt will be made to identify me. I understand that I can feel free to answer openly or honestly, without fear of repercussions or reward. In addition I understand that I may withdrawal or revoke my consent at any time and discontinue participation. I understand that to guarantee my responses as anonymous my consent form will be separated from my answers upon submission.

I understand that I should take copy B below as my copy of this consent form. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

Signature of Participant	Date	Signature of Researcher

This research has been reviewed and approved by the Institutional Review Board - Human Subjects in Research, Texas A&M University. For research related problems or questions regarding subject's rights, the Institutional Review Board may be contacted through Dr. Richard E. Miller, IRB Coordinator, Office of Vice President for Research and Associate Provost fro graduate Studies at (409) 845-1811. For questions concerning this research topic contact Scott Efflandt, Department of Sociology at Texas A&M University, at (409) 845-4944.

PART A (file copy)

VALUES ASSESSMENT QUESTIONNAIRE

Instructions:

 The purpose of this survey is to determine the extent of similarities or differences in values between people of the United States, and what factors may influence this potential condition. If you would like to see the results of this study or have further questions, contact;

Scott Efflandt
Department of Sociology
Texas A&M University
College Station, TX 77843-4351

E-Mail: 74667.3541@compuserve.com

- This survey is designed to assess <u>your</u> personal values. Answer it truthfully. All responses will remain confidential.
- DO NOT enter your name or SSN on this questionnaire or answer sheet. You will
 notice a random number entered in the SSN box of the questionnaire, this control
 number allows for the accountability of the material.
 - ⇒ The number in the upper right hand corner of the questionnaire should match the number entered in the SSN section of the scan-tron sheet.
- Use a number 2 pencil to answer the questions on the scan-tron sheet provided.
- For questions 15, 55, and 56 you will write your answer on the questionnaire.
- Provide only one answer per question.
 - ⇒ Confine your answer to one of the options provided, selecting the single best, or closest response.
 - ⇒ If you change your answer, erase the previous choice completely.
 - ⇒ Completely darken the entire circle of your answer.
- Be careful to ensure the question number you are answering corresponds to the number on the scan tron sheet.
- Open the Questionnaire and begin now.

PART I: Administrative Data; For this portion of the questionnaire you will complete the portion that begins with the section labeled "LAST NAME" on the left side /or/ top portion of the scan-tron sheet.

a. In the "COURSE NO." box indicate your current age in years. For example if you are 18 years old enter your age as 018; if you are 43 years, 11 months enter your age as 043. On the scan-tron sheet write your answer in the white boxes at the top of the "COURSE NO." area and mark the appropriate circle.

b. In the "SECTION" box indicate which category best describes your current religious preference. On the scan-tron sheet write your answer in the white boxes at the top of the "SECTION" area and mark the appropriate circles.

001 for Roman Catholic

002 for Jewish

003 for Baptist

004 for Methodist

005 for Mormon "Church of Jesus Christ of Latter Day Saints"

006 for Protestant, Other Denominations

007 for Other, Religions (e.g., Buddhism, Muslim)

008 for No Denomination or Non Denominational, but do believe in God

009 for Do not believe in God

c. In the "OPTIONS" box indicate which choice best describes your current education level. On the scan-tron sheet write your answer in the white box at the top of the "OPTIONS" area and mark the appropriate circle.

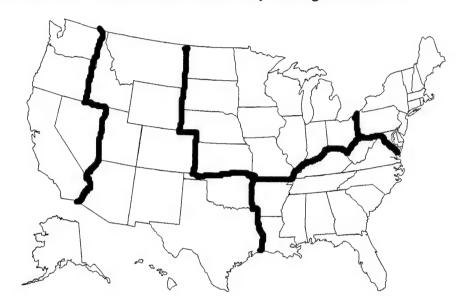
- A. Non high school graduate
- B. High school graduate
- C. Attended technical school
- **D**. Completed technical school and received accreditation or certificate of graduation
 - E. 1-2 years of college
 - F. 3-4 years of college, no 4 year degree awarded
 - G. Received Bachelor's degree
 - H. Received some level of graduate education
 - I. Received Masters degree
 - J. Received Doctoral degree

- d. In the "SHEET TYPE" box indicate your gender. On the scan-tron sheet write your answer in the white box at the top of the "SHEET TYPE" area and mark the appropriate circle.
 - A. Male
 - H. Female
- e. In the "TEST FORM" box indicate the total number of brothers and sisters you have. On the scan-tron sheet write your answer in the white boxes at the top of the "TEST FORM" area and mark the appropriate circle.
 - A. 0, zero brothers or sister
 - B. 1 brother or sister
 - C. 2 brothers and/or sisters
 - D. 3 or more, brothers and/or sisters

PART II: You have completed the administrative portion of the survey, please move to answer row 1.

- 1. Which of the following best describes your ethnicity?
 - A. White
 - B. Black
 - C. Hispanic
 - D. Asian
 - E. Other
- 2. What was your citizen ship at birth?
 - A. US, born in America, both parents US citizens
 - B. US, born outside the US, both parents US citizens
 - C. US, born in America, both parents non US citizens or unknown citizenship
 - D. Dual citizenship, one parent US citizen, one parent of another country
 - E. Non US citizen
- 3. Through age 16, how many times did your family move a distance that resulted in a change of school districts?
 - \mathbf{A} . 0
 - **B**. 1
 - **C**. 2
 - **D**. 3
 - E. 4 or more

- 4. Through age 16, what was the longest time spent by you at one residence?
 - A. 4 years or less
 - **B**. 5
 - **C**. 6
 - **D**. 7
 - E. 8 or more
- 5. Through age 16, what was the location of your longest residence?



- 6. Through age 16, how would you describe your most prevalent childhood home?
 - **A**. Large City (over 250,000)
 - B. Suburb (near a large city, or, it and adjacent suburbs total over 250,000)
 - C. Small Town (under 250,000)
 - D. Rural (isolated or agricultural)
 - E. Foreign (spent childhood outside of US)
- 7. At age 16 what was the marital status of your parents?
 - A. Married
 - B. Widowed (One or both parents deceased)
 - C. Divorced
 - D. Separated
 - E. Never Married

- 8. Which phrase best describes your participation in organized religious activities?
 - A. 1 or less times per month, but at least once a year
 - B. 2 times per month
 - C. 3 times per month
 - D. 4 or more times per month
 - E. Do not participate in organized religious activities
- 9. What is your current marital status?
 - A. Single, never married
 - B. Divorced, currently single
 - C. Widow(er), not remarried
 - D. Separated
 - E. Married (to include former widow(er) or divorcee)
- 10. Of your three best friends (ever), which of the following best describes how many of them know each other?
 - A. All 3 know each other, but are not close friends
 - B. 2 of the 3 know each other but are not close friends
 - C. All 3 are close friends
 - D. 2 of the 3 are close friends, the third is not
 - E. None of them know each other
- 11. Has your mother ever served in the US Armed Forces (active or reserve)?
 - A. Army
 - B. Air Force
 - C. Navy or Coast Guard
 - D. Marine Corps
 - E. Mother did not serve
- 12. What is the education level of your mother?
 - A. Non high school graduate
 - B. High school graduate
 - C. Some College
 - D. Received Bachelor's degree
 - E. Some level of graduate education
- 13. Has your father ever served in the US Armed Forces (active or reserve)?
 - A. Army
 - B. Air Force
 - C. Navy or Coast Guard
 - D. Marine Corps
 - E. Father did not serve

14. What is the education level of your <u>father?</u>
A. Non high school graduate
B. High school graduate
C. Some college, undergraduate
D. Received Bachelor's degree
E. Some level of graduate education
15. What is your military experience?
A. Currently serving on Active Duty, GO TO QUESTION 15a
B. Currently serving in the active National Guard or Reserve, GO TO
QUESTION 15b
C. Previously served on Active Duty, GO TO QUESTION 15c
D. Previously served in the active National Guard or Reserve, GO TO
QUESTION 15d
E. No previous military experience, GO TO QUESTION 19
15a. If currently on active duty enter your entry date to active duty (BASD) (mo/yr)
Go to Question 16.
15b. If currently in National Guard or Reserves enter your enlistment date (mo/yr)
Go to Question 16.
15c. If previously served on Active Duty, enter length of service (mo/yr)/////
15d. If previously served in National Guard or Reserves enter length of service (mo/yr)
Go to Question 16.
16. What component of the Armed Forces did you serve?
A. Army
B. Air Force
C. Navy or Coast Guard
D. Marine Corps
E. Assigned only to the Individual Ready Reserve (IRR)

- 17. What rank/grade did you attain in the military?
 - A. E1-E4, Private through Specialist
 - B. E5, Sergeant
 - C. E6, Staff Sergeant
 - D. E7, Sergeant First Class
 - E. E8 & up, Master Sergeant through officer
- 18. What is your combat experience? If more than one, select most recent.
 - A. Desert Storm/Shield
 - B. Panama
 - C. Somalia
 - D. Other combat or peace keeping missions
 - E. No combat experience
- 19. How would you rate the importance of a comfortable life, (a prosperous life)?¹³
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 20. How would you rate the importance of <u>equality</u>, (brotherhood and equal opportunity for all)?
 - A. Highly (Most) Important
 - **B**. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 21. How would you rate the importance of an exciting life, (a stimulating, active life)?
 - A. Highly (Most) Important
 - $\boldsymbol{B}.\ Very\ Important$
 - C. Important
 - **D**. Slightly Important
 - E. Not Important

¹³ Modified and reproduced by special permission of the Publisher, Consulting Psychologist Press, Palo Alto, CA 94303 from Rokeach Value Survey by Milton Rokeach. All rights reserved. Further reproduction is prohibited without the Publisher's written consent.

- 22. How would you rate the importance of <u>family security</u>, (taking care of loved ones)?
 A. Highly (Most) Important
 B. Very Important
 C. Important
 D. Slightly Important
 E. Not Important
- 23. How would you rate the importance of **freedom**, (independence and free choice)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 24. How would you rate the importance of <u>health</u>, (physical and mental well-being)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 25. How would you rate the importance of **inner harmony**, (freedom from inner conflict)?
 - A. Highly (Most) Important
 - **B**. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 26. How would you rate the importance of <u>mature love</u>, (sexual and spiritual intimacy)?
 - A. Highly (Most) Important
 - B. Very Important
 - ${\bf C}$. Important
 - D. Slightly Important
 - E. Not Important
- 27. How would you rate the importance of <u>national security</u>, (protection from attack)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - **D**. Slightly Important
 - E. Not Important

- 28. How would you rate the importance of pleasure, (an enjoyable, leisurely life)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 29. How would you rate the importance of salvation, (saved, eternal life)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 30. How would you rate the importance of self respect, (self esteem)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 31. How would you rate the importance of <u>a sense of accomplishment</u>, (a lasting contribution)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - **D**. Slightly Important
 - E. Not Important
- 32. How would you rate the importance of **social recognition**, (respect and admiration)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important

- 33. How would you rate the importance of true friendship, (close companionship)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 34. How would you rate the importance of wisdom, (a mature understanding of life)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 35. How would you rate the importance of <u>a world at peace</u>, (a world free of war and conflict)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 36. How would you rate the importance of <u>a world of beauty</u>, (beauty of nature and the arts)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 37. How would you rate the importance of being ambitious, (hardworking and aspiring)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important

- 38. How would you rate the importance of being broad minded, (open minded)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 39. How would you rate the importance of being capable, (competent; effective)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 40. How would you rate the importance of being clean, (neat and tidy)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 41. How would you rate the importance of being **courageous**, (standing up for your beliefs)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 42. How would you rate the importance of being forgiving, (willing to pardon others)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important

- 43. How would you rate the importance of being <u>helpful</u>, (working for the welfare of others)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 44. How would you rate the importance of being **honest**, (sincere and truthful)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 45. How would you rate the importance of being imaginative, (daring and creative)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 46. How would you rate the importance of being <u>independent</u>, (self-reliant; self-sufficient)?
 - A. Highly (Most) Important
 - **B**. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- 47. How would you rate the importance of being intellectual, (intelligent and reflective)?
 - A. Highly (Most) Important
 - B. Very Important
 - ${\bf C}$. Important
 - D. Slightly Important
 - E. Not Important

48. How would you rate the importance of being logical, (consistent; rational)? A. Highly (Most) Important B. Very Important C. Important **D**. Slightly Important E. Not Important 49. How would you rate the importance of being loving, (affectionate and tender)? A. Highly (Most) Important B. Very Important C. Important **D**. Slightly Important E. Not Important 50. How would you rate the importance of being loval, (faithful to friends or the group)? A. Highly (Most) Important B. Very Important C. Important D. Slightly Important E. Not Important 51. How would you rate the importance of being obedient, (dutiful; respectful)? A. Highly (Most) Important **B**. Very Important C. Important D. Slightly Important E. Not Important 52. How would you rate the importance of being **polite**, (courteous and well mannered)? A. Highly (Most) Important B. Very Important C. Important D. Slightly Important E. Not Important 53. How would you rate the importance of being responsible, (dependable and reliable)? A. Highly (Most) Important B. Very Important C. Important

D. Slightly ImportantE. Not Important

- 54. How would you rate the importance of being <u>self controlled</u>, (restrained, self disciplined)?
 - A. Highly (Most) Important
 - B. Very Important
 - C. Important
 - D. Slightly Important
 - E. Not Important
- GO TO NEXT PAGE

PART III: <u>Values Ranking</u>; For the remainder of the survey you will write on this questionnaire.

• For this part you will rank order the values in order of their importance to you. Number 1 is the value that is the most important. Number 18 is the value that is the least important. Each number can be used only once. On the line next to the value enter your rating of its importance. To avoid omitting or duplicating a number, cross off the number from the list below as you use it.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

A COMFORTABLE LIFE (a prosperous life)
EQUALITY (brotherhood and equal opportunity for all)
AN EXCITING LIFE (a stimulating, active life)
FAMILY SECURITY (taking care of loved ones)
FREEDOM (independence and free choice)
HEALTH (physical and mental well being)
INNER HARMONY (freedom from inner conflict)
MATURE LOVE (sexual and spiritual intimacy)
NATIONAL SECURITY (protection from attack)
PLEASURE (an enjoyable, leisurely life)
SALVATION (saved; eternal rest)
SELF RESPECT (self esteem)
A SENSE OF ACCOMPLISHMENT (a lasting contribution)
SOCIAL RECOGNITION (respect and admiration)
TRUE FRIENDSHIP (close companionship)
WISDOM (a mature understanding of life)
A WORLD AT PEACE (a world free of war and conflict)
A WORLD OF BEAUTY (beauty of nature and the arts)

• For this part you will rank order a different set of values in order of their importance to you. Number 1 is the value that is the most important. Number 18 is the value that is the least important. Each number can be used only once. On the line next to the value enter your rating of its importance. To avoid omitting or duplicating a number, cross off the number from the list below as you use it.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

AMBITIOUS (hardworking and aspiring)
BROAD MINDED (open minded)
CAPABLE (competent; effective)
CLEAN (neat and tidy)
COURAGEOUS (standing up for your beliefs)
FORGIVING (willing to pardon others)
HELPFUL (working for the welfare of others)
HONEST (sincere and truthful)
IMAGINATIVE (daring and creative)
INDEPENDENT (self-reliant; self-sufficient)
INTELLECTUAL (intelligent and reflective)
LOGICAL (consistent; rational)
LOVING (affectionate and tender)
LOYAL (faithful to friends or the group)
OBEDIENT (dutiful; respectful)
POLITE (courteous and well-mannered)
RESPONSIBLE (dependable and reliable)
SELF CONTROLLED (restrained: self disciplined

Thank you for volunteering to complete this survey. Turn the questionnaire and answer sheet in to the person who distributed them to you.

APPENDIX B

ROKEACH VALUE SURVEY COPYRIGHT RELEASE



Scott L. Efflandt Texas A&M University Department of Sociology College Station, Texas 77843-4351

PERMISSION AGREEMENT FOR MODIFICATION & REPRODUCTION

Agreement Issued: March 27, 1997

Customer Number: Permission Code: 0728

Invoice Number:

In response to your request of March 17, 1997, upon concurrent receipt by Consulting Psychologists Press, Inc., of this signed Permission Agreement and payment of the Permission Fee, permission is hereby granted to you to modify and reproduce the Rokeach Value Survey (RVS) by asking respondents to rate each value's importance on an ordinal scale as opposed to ranking them for research use within your dissertation entitled, "The Divergence of American Values". Research will be conducted June 1, 1997 through June 30, 1997 and you may reproduce up to 500 copies as modified only. This Permission Agreement shall automatically terminate June 30, 1997 or upon violation of this Permission Agreement including, but not limited to, failure to pay the Permission Fee of \$280.00 for up to 500 copies reproduction fee + \$30 processing fee = \$310.00 total or by failure to sign and return this Permission Agreement within 45 days from March 27, 1997.

The permission granted hereunder is limited to this one-time use only.

The permission granted hereunder is specifically limited as specified in this agreement.

The permission granted hereunder shall be for research use of printed material only.

The permission granted hereunder specifically excludes the right to reproduce modified materials in any publication, including dissertations or theses.

This Permission Agreement shall be subject to the following conditions:

- (a) Any material reproduced must be used in accordance with the guidelines of the American Psychological Association.
- (b) Any material reproduced must contain the following credit lines:

"Modified and reproduced by special permission of the Publisher, Consulting Psychologists Press, Palo Alto, CA 94303 from Rokeach Value Survey by Milton Rokeach. Copyright 1983 by Milton Rokeach. All rights reserved. Further reproduction is prohibited without the Publisher's written consent."

- (c) None of the materials may be sold or used for purposes other than those mentioned above, including, but not limited to, any commercial or for-profit use. Commercial and/or for profit use of the copyright-protected materials and/or any derivative work of the modified materials is specifically excluded from the permission granted herein.
- (d) One copy of any material reproduced will be sent to the Publisher immediately after its completion to indicate that the appropriate credit line has been used. This Agreement shall be rescinded if one copy of the material is not received within forty-five days of reproduction/publication by a CPP representative.
- (e) CPP subscribes to the general principles of test use as set forth in the Standards for Educational and Psychological Testing Copyright 1985 by the American Psychological Association. The customer's/user's attention is drawn to the following statements:

"The test user, in selecting or interpreting a test, should know the purposes of the testing and the probable consequences. The user should know the procedures necessary to facilitate effectiveness and to reduce bias in test

use. Although the test developer and publisher should provide information on the strengths and weaknesses of the test, the ultimate responsibility for appropriate test use lies with the test user. The user should become knowledgeable about the test and its appropriate use and also communicate this information, as appropriate, to others.

- 6.1 Test users should evaluate the available written documentation on the validity and reliability of tests for the specific use intended.
- 6.3 When a test is to be used for a purpose for which it has not been validated, or for which there is no supported claim for validity, the user is responsible for providing evidence of validity.
- 6.5 Test users should be alert to probable unintended consequences of test use and should attempt to avoid actions that have unintended negative consequences."

CPP shall not be responsible for the use or misuse of the materials or services licensed under this permission agreement. The customer/user assumes all responsibility for use or misuse of the same. Unless expressly agreed to in writing by CPP, all materials and services are licensed without warranty, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. Refund of contract fees at CPP's sole option is the sole and exclusive remedy and is in lieu of actual, consequential, or incidental damages for use or misuse of CPP materials and services and in no event shall CPP liability exceed the contract fees of license of said materials and services. Unless otherwise expressed this agreement is for modification and reproduction of said items only. To request permission for inclusion of Sample Items from the material, please contact CPP's Permission Department.

(f) Scott L. Efflandt agrees that the RVS as modified under this Agreement is a derivative work of the RVS and hereby automatically assigns all right, title, and interest in any such derivative work created under this Permission Agreement in perpetuity to Consulting Psychologists Press (CPP) or as directed by CPP, immediately upon completion and without further consideration.

CONSULTING PSYCHOLOGISTS PRESS	I AGREE TO THE ABOVE CONDITIONS,
By Dun Cestano	By Scow Lefflandt
Authorized Representative	Scott L. Efficial
Date 4/18/97	Date 8 AFR 97

APPENDIX C

TEXAS A&M HUMAN SUBJECTS BOARD APPROVAL



TAMU # E-97-16-2

Summary Gover Sheet
Protocol for Human Subjects in Research

Please check off or provide details on the following (enter N/A if not applicable): X Exemption Requested See Page 2
Principal Investigator Name Scott L. Efflandt Faculty Graduate Student* X
College/Dept Liberal Arts / Sociology Mail Stop 4351 Phone 845-4944
Project Title Divergence of Values Study
Subjective Estimate of Risk to Subject:LowModerate HighX Rione Gender of subjects:Male Female Both Red specific Total Participants (est.): 150 Source of Subjects: Direct Person to person contact Psychology Subject Pool Direct Person to person contact Community Newspaper Ad** Posted Notices** Letter** Prisons X Other (Please describe) Class room Other (Please specify) Compensation*** Yes NoX Deception † Yes NoX Location of Experiment: N/A
Invasive or Sensitive Procedures: Yes No X Sensitive Subject Matter: Yes No X Blood Samples
_ rDNA
Use of Video or Audio tapes (please indicate) Provisions for Confidentiality/Anonymity
Retained Yes No Replies Coded Retained/Length of Time Secure Storage Destroy/Erase Yes No X Anonymous Response Other (explain) Confidential Response Use specified in consent form? Yes No Use/Access to tapes:
Exact Location Where Signed Consent Forms Will be Filed: Office of Dr. James Burk. TAMIJ (Must be kept on file for 3 years after the completion of the project).
* Must include signature of committee chair on protocol ** Please attach *** Please attach conditions, schedule of payment. † If yes, attach a debriefing form

Page 1 of 2

REQUEST FOR EXEMPTION from full IRB review

Some research projects involving human subjects are exempt from full review by the IRB. See the attached sheet on research categories exempt from full IRB review.

Basis for Exen	nption [Please refer to attached "Categories Exempt From Full IRB Review."]
Sch	ablished Educational Settings/Normal Educational Practices(a letter of approval from a gool official must be obtained before the study can be conducted; send copy to the IRB) to of educational anonymous tests (cognitive, diagnostic, aptitude, advancement; attach by).
<u> </u>	rvey or interview procedures, [unless subjects might be identified party legal or personal c, and unless survey or procedures deal with sensitive matters of personal behavior]
Ob and An	servations of public behavior [unless subjects mightyle identified put at legal or personal risk, dunless observations deal with sensitive matters of personal behavior] onymous collection or study of existing documents; records, pathological or diagnostic ecimens.
	ste and food quality evalution and consumer acceptance studies.
However,	demographically, including these groups who have been traditionally underrepresented. it is recognized that the available pool of subjects may preclude having a balanced. If you cannot use a diverse population in your research, you must justify why not.
-1300)	-277 1 26 MAG 17
Principal In	
11 -	vestigator Signature and Date
Jus	
10.0	Restigator Signature and Date 21 Man 1667 Committee Chair Signature and Date
10.0	Lull 27 Main 167
10.0	Restigator Signature and Date 21 Man 1667 Committee Chair Signature and Date

Protocol for Human Subjects in Research	TARRA A SINGUNIVERSIVE FORM I DECENDED TO 188
	Protocol for Human Subjects in Research

Summary Cover S	Sheet
Protocol for Human Subject	
Protocol for Human Subject	is in Research
Please check off or provide details on the following (enter N/A if not	applicable): X Exemption Requested See Page 2
Principal Investigator Name Scott L. Efflandt	Faculty Graduate Student* _ X
College/Dept Liberal Arts / Sociology Ma	
Project Title Divergence of Values Study (reference	TAMU# E97-162)
Subjective Estimate of Risk to Subject:Low Moderate _	High X None
Gender of subjects: Male Female Both X Age(s): 18+	
Source of Subjects: Psychology Subject Pool Other TAMU Students Community Posted Notices** Prisons Variety Other (Please specify) US Army Subject Recruitment: X Direct Person-to pers	
Compensation*** Yes No X	
Invasive or Sensitive Procedures: Yes No _X Blood Samples Urine Samples Physical Measurements Stress Exercise (electrodes, etc.) Review of Medical Records Psychological Inventory Other (Specify) TDNA	Sensitive Subject Matter: Yes No X Alcohol, Drugs, Sex Depression/Suicide Learning Disability Other (Specify)
Use of Video_ or Audio tapes (please indicate)	Provisions for Confidentiality/Anonymity
Retained Yes No Retained/Length of Time Destroy/Erase Yes No Other (explain) Use specified in consent form? Yes No Use/Access to tapes:	Replies Coded Secure Storage X Anonymous Response Confidential Response
Exact Location Where Signed Consent Forms Will be Filed: Office (Must be kept on file for 3 years after the completion of the project	
(integrate of school into tot 2 Jeans after the completion of the project	,.
 Must include signature of committee chair on protocol 	
** Please attach	
*** Please attach conditions, schedule of payment.	
† If yes, attach a debriefing form	

Page 1 of 2

REQUEST FOR EXEMPTION from full IRB review

Some research projects involving human subjects are exempt from full review by the IRB. See the attached sheet on research categories exempt from full IRB review.

Basis for Exe	mption [Please refer to attached "Categories Exempt From Full IRB Review."]
U	stablished Educational Settings/Normal Educational Practices(a letter of approval from a hool official must be obtained before the study can be conducted; send copy to the IRB) se of educational anonymous tests (cognitive, diagnostic, aptitude, advancement; attach py).
XX Su	rvey or interview procedures. Junless subjects might be identified, must be be a
Oi	oservations of public behavior [unless subjects might be identified, put at legal or personal risk, d unless observations deal with sensitive matters of personal behavior.]
sp	ecimens.
Та	ste and food quality evalution and consumer acceptance stores
population However,	opulation is becoming increasingly quity ally, inquistically, economically, and ethnically he research needs to make a concerted effort to ensure that research subjects reflect the demographically, including these groups who have been traditionally underrepresented, it is recognized that the available pool of subjects may preclude having a balanced. If you cannot use a diverse population in your research, you must justify why not.
- VCA	Soffant 24 APR 97
Principal In	vestigator Signature and Date
UMB.	Burl 24 April 1997
Graduate C	mmittee Chair-Signature and Date
[1]	9th
Department	Head Signature and Date
	3/2 N/n 3/2 Ang)
institutional	Review Board Signature and Date

APPENDIX D

TABLES

Table 1. Terminal Values Correlations

	Comfortable			Family		
	Life	Equality Ex	citina Life	Security	Freedom	Health
Comfortable		quanty	tolling Life	Occurry	rieedom	пеаш
Life		-0.058	0.161	-0.022	-0.106	0.043
Equality	0.055		-0.160	0.041	0.132	-0.144
Exciting Life Family	0.055	0.051		-0.200	0.056	0.029
Security	0.052	0.053	0.052		-0.060	-0.024
Freedom	0.050	0.053	0.053	0.052		-0.094
Health Inner	0.051	0.050	0.053	0.055	0.054	
Harmony Mature	0.054	0.053	0.051	0.053	0.050	0.054
Love National	0.049	0.048	0.052	0.055	0.049	0.049
Security	0.048	0.049	0.047	0.053	0.054	0.049
Pleasure	0.047	0.043	0.046	0.054	0.055	0.047
Salvation Self	0.048	0.049	0.049	0.048	0.045	0.050
Respect	0.050	0.054	0.500	0.056	0.052	0.054
Sense of						
Accomplish. Social	0.048	0.048	0.047	0.054	0.051	0.054
Recognition True	0.053	0.048	0.050	0.057	0.054	0.054
Friendship	0.045	0.053	0.048	0.056	0.049	0.050
Wisdom World	0.059	0.052	0.049	0.052	0.050	0.051
Peace World of	0.050	0.048	0.046	0.054	0.053	0.049
Beauty	0.046	0.053	0.057	0.055	0.058	0.054

Note: n = 191. tau b coefficients in upper right, standard errors in lower left.

Table 1. Continued

	Inner Harmony	Mature Love	National Security	Pleasure	Salvation	Self Respect
Comfortable Life	-0.156	0.018	-0.120	0.164	-0.126	-0.052
Equality	0.002	-0.053	0.067	-0.164	0.058	-0.061
Exciting Life Family	-0.077	0.030	-0.042	0.243	-0.241	-0.034
Security	-0.009	0.000	0.088	-0.112	0.057	-0.056
Freedom	-0.081	-0.173	0.089	0.023	-0.030	-0.054
Health Inner	-0.009	-0.085	-0.137	0.075	-0.128	0.061
Harmony Mature		0.024	-0.056	-0.017	-0.061	-0.068
Love National	0.051		-0.155	0.111	-0.029	-0.132
Security	0.048	0.050		-0.214	-0.011	-0.083
Pleasure	0.050	0.050	0.051		-0.172	-0.009
Salvation Self	0.056	0.049	0.048	0.045		-0.119
Respect	0.048	0.050	0.047	0.051	0.047	
Sense of Accomplish. Social	0.053	0.056	0.047	0.051	0.048	0.056
Recognition True	0.052	0.058	0.050	0.055	0.046	0.054
Friendship	0.052	0.053	0.048	0.053	0.054	0.049
Wisdom World	0.050	0.052	0.048	0.048	0.050	0.052
Peace World of	0.049	0.051	0.053	0.051	0.051	0.055
Beauty	0.054	0.059	0.048	0.054	0.054	0.057

Table 1. Continued

	Sense of	Social	True		World	World of
		Recognition	Friendship	Wisdom	Peace	Beauty
Comfortable						Doddity
Life	-0.014	-0.019	-0.094	-0.151	-0.104	-0.048
Equality	-0.130	-0.145	-0.082	-0.013	0.088	-0.061
Exciting Life Family	-0.074	0.075	-0.050	-0.126	-0.166	-0.031
Security	-0.059	-0.131	-0.068	-0.082	-0.051	-0.045
Freedom	-0.104	-0.077	-0.097	-0.037	0.022	0.051
Health Inner	0.045	0.062	-0.053	-0.117	-0.089	0.022
Harmony Mature	-0.087	-0.038	0.051	0.026	-0.027	-0.046
Love National	-0.153	0.031	0.026	-0.036	-0.135	-0.045
Security	-0.039	-0.025	-0.108	-0.103	0.171	-0.099
Pleasure	-0.148	0.042	-0.054	-0.131	-0.218	-0.034
Salvation Self	-0.056	-0.178	0.007	0.068	0.019	-0.095
Respect	0.189	0.081	-0.004	0.043	-0.135	-0.090
Sense of Accomplish. Social		0.161	-0.064	0.100	-0.091	-0.058
Recognition True	0.053		-0.069	-0.016	-0.141	-0.126
Friendship	0.048	0.051		-0.059	0.029	0.046
Wisdom World	0.050	0.052	0.054		-0.016	0.007
Peace World of	0.054	0.054	0.052	0.053		0.174
Beauty	0.056	0.054	0.050	0.048	0.053	

Table 2. Instrumental Values Correlations

Broad							
	Ambitious	Minded	Capable	Clean Co	ourageous	Forgiving	
Ambitious Broad		0.090	0.150	-0.070	0.042	-0.112	
Minded	0.056		0.034	0.006	0.018	-0.072	
Capable	0.052	0.055		-0.065	0.054	-0.170	
Clean	0.053	0.053	0.055		-0.084	-0.049	
Courageous	0.056	0.056	0.047	0.054		-0.024	
Forgiving	0.055	0.050	0.052	0.047	0.055		
Helpful	0.049	0.056	0.058	0.052	0.050	0.053	
Honest	0.049	0.047	0.055	0.051	0.045	0.052	
Imaginative	0.054	0.052	0.055	0.053	0.050	0.051	
Independent	0.051	0.051	0.050	0.053	0.051	0.053	
Intellectual	0.051	0.048	0.047	0.057	0.050	0.049	
Logical	0.055	0.050	0.050	0.049	0.052	0.048	
Loving	0.050	0.049	0.046	0.050	0.050	0.047	
Loyal	0.045	0.053	0.053	0.051	0.050	0.014	
Obedient	0.049	0.045	0.048	0.050	0.051	0.048	
Polite	0.048	0.044	0.043	0.049	0.049	0.051	
Responsible Self	0.052	0.053	0.050	0.052	0.051	0.051	
Controlled	0.049	0.053	0.050	0.051	0.051	0.052	

Note: n = 181. tau b coefficients in upper right, standard errors in lower left.

Table 2. Continued

			*			
	Helpful	Honest	Imaginative	Independent	Intellectual	Logical
Ambitious Broad	-0.063	-0.076	0.034	0.067	-0.059	-0.044
Minded	0.022	-0.274	0.122	0.011	-0.023	-0.059
Capable	-0.078	-0.089	-0.015	0.081	-0.048	0.044
Clean	0.013	-0.077	-0.093	-0.087	-0.080	-0.037
Courageous	-0.040	-0.110	-0.011	0.003	-0.011	-0.052
Forgiving	0.147	0.127	-0.132	-0.125	-0.110	-0.168
Helpful		-0.064	0.005	-0.132	-0.102	-0.013
Honest	0.056		-0.169	-0.035	-0.002	-0.096
Imaginative	0.053	0.051		-0.013	0.123	0.073
Independent	0.053	0.055	0.050		0.019	0.045
Intellectual	0.048	0.052	0.050	0.053		0.108
Logical	0.050	0.055	0.048	0.054	0.060	
Loving	0.048	0.056	0.051	0.045	0.054	0.053
Loyal	0.050	0.050	0.056	0.050	0.051	0.045
Obedient	0.052	0.057	0.050	0.055	0.051	0.053
Polite	0.052	0.051	0.049	0.050	0.053	0.051
Responsible Self	0.050	0.048	0.049	0.051	0.051	0.053
Controlled	0.047	0.051	0.053	0.050	0.052	0.050

Table 2. Continued

Table 2. Condit	ucu					
	Loving	Loyal	Obedient	Polite	Responsible	Self Controlled
Ambitious	-0.079	-0.104	-0.058	-0.166	-0.045	-0.141
Broad Minded	-0.083	-0.098	-0.075	-0.051	-0.158	-0.027
Capable	-0.162	-0.057	-0.070	-0.180	0.104	-0.119
Clean	-0.017	-0.146	0.023	0.131	-0.143	-0.046
Courageous	-0.171	-0.050	0.019	-0.126	-0.025	-0.079
Forgiving	0.186	0.014	-0.085	0.060	-0.081	-0.089
Helpful	-0.014	0.001	-0.067	-0.025	-0.172	-0.124
Honest	0.062	0.112	-0.036	-0.042	0.118	-0.020
Imaginative	-0.059	-0.094	-0.156	-0.090	-0.200	-0.022
Independent	-0.194	-0.060	-0.078	-0.175	0.063	0.029
Intellectual	-0.050	-0.031	-0.141	-0.103	-0.073	-0.066
Logical	-0.077	-0.083	-0.072	-0.098	-0.099	-0.060
Loving		-0.043	-0.083	0.100	-0.032	-0.041
Loyal	0.051		0.016	-0.067	0.091	-0.010
Obedient	0.053	0.056		0.103	0.070	0.088
Polite	0.055	0.053	0.056		-0.036	0.028
Responsible Self	0.049	0.055	0.049	0.056		0.140
Controlled	0.050	0.057	0.053	0.056	0.058	

Table 3. Group Value Systems as Measured by Kendall's W

		Group	
	Students	Recruits	Soldiers
Terminal Values			
n =	53	38	100
Sum Rankings	9063	6498	17100
Mean Rankings	503.5	361	950
Sum of Squares	407782.50	129730.00	1094980.00
df	17	17	17
Chi Square	269.97	119.79	384.20
Kendall's W	0.30 ***	0.18 ***	0.23 ***
Instrumental Values			
n =	53	34	94
Sum Rankings	9063	5814	16074
Mean Rankings	503.5	323	893
Sum of Squares	252326.50	35768.00	411794.00
df	17	17	17
Chi Square	167.05	36.91	153.71
Kendall's W	0.19 ***	0.06 **	0.10 ***

Note: Kendall Coefficent of Concordance: W test.

^{*}p.<0.05 ** p. <0.01 ***p.<0.001

Table 4. Index of Dissimilarities for Terminal Values

	Group Comparisons				
Value	Students -	Recruits -	Soldiers -		
value	Recruits	Soldiers	Students		
Comfortable Life	0.45	0.37	0.20		
Equality	0.36	0.36	0.20		
Exciting Life	0.36	0.36	0.20		
Family Security	0.28	0.31	0.28		
Freedom	0.24	0.13	0.22		
Health	0.41	0.33	0.20		
Inner Harmony	0.33	0.38	0.26		
Mature Love	0.32	0.31	0.21		
National Security	0.55	0.33	0.30		
Pleasure	0.38	0.39	0.28		
Salvation	0.48	0.31	0.43		
Self Respect	0.32	0.36	0.32		
Sense Accomplish.	0.36	0.36	0.21		
Social Recognition	0.38	0.42	0.33		
True Friendship	0.54	0.32	0.37		
Wisdom	0.37	0.31	0.34		
World Peace	0.45	0.39	0.33		
World of Beauty	0.25	0.34	0.19		
df = 323 Chi Square Overall Difference	1442.07 0.38 ***	1536.37 0.33 ***	1737.39 0.28		

Table 5. Index of Dissimilarities for Instrumental Values

	Group Comparisons				
	Students -	Recruits -	Soldiers -		
Value	Recruits	Soldiers	Students		
Ambitious	0.28	0.29	0.31		
Broad Minded	0.29	0.31	0.23		
Capable	0.24	0.29	0.22		
Clean	0.35	0.28	0.29		
Courageous	0.39	0.33	0.36		
Forgiving	0.32	0.23	0.23		
Helpful	0.35	0.32	0.31		
Honest	0.37	0.38	0.29		
Imaginative	0.30	0.36	0.27		
Independent	0.46	0.36	0.28		
Intellectual	0.43	0.39	0.41		
Logical	0.34	0.30	0.37		
Loving	0.46	0.27	0.29		
Loyal	0.32	0.31	0.23		
Obedient	0.51	0.35	0.26		
Polite	0.37	0.30	0.22		
Responsible	0.31	0.33	0.27		
Self Controlled	0.38	0.28	0.36		
df = 323 Chi Square Overall Difference	830.62 0.38 ***	911.71 0.32 ***	1081.63 0.29		

Table 6. Terminal Value Rankings by Group

		Group	
Value	Students	Recruits	Soldiers
1. Most Important	Family Security	Family Security	Family Security
2	Salvation	National Security	Health
3	True Friendship	Freedom	Freedom
4	Freedom	Comfortable Life	Self Respect
5	Health	Health	Mature Love
6	Comfortable Life	Self Respect	True Friendship
7	Self Respect	Mature Love	Comfortable Life
8	Mature Love	Equality	Equality
9	Wisdom	Exciting Life	Wisdom
10	Pleasure	Salvation	Salvation
11	Sense of Accomplish.	Wisdom	National Security
12	Exciting Life	Inner Harmony	Pleasure
13	Equality	True Friendship	Sense of Accomplish.
14	Inner Harmony	Pleasure	Inner Harmony
15	National Security	Sense of Accomplish.	Exciting Life
16	Social Recognition	World Peace	World Peace
17	World of Beauty	Social Recognition	World of Beauty
18. Least Important	World Peace	World of Beauty	Social Recognition
Note: $N = 191$	n=53	n=38	n=100

Note: N = 191 n=53 Values ordered by mean score. Table 7. Instrumental Value Rankings by Group

		Group	
Value	Students	Recruits	Soldiers
1. Most Important	Honest	Loyal	Honest
2	Responsible	Courageous	Responsible
3	Loving	Ambitious	Loyal
4	Loyal	Independent	Loving
5	Ambitious	Broad Minded	Courageous
6	Independent	Responsible	Capable
7	Forgiving	Self Controlled	Ambitious
8	Intellectual	Honest	Self Controlled
9	Capable	Capable	Broad Minded
10	Courageous	Obedient	Independent
11	Self Controlled	Helpful	Polite
12	Broad Minded	Polite	Clean
13	Helpful	Logical	Helpful
14	Logical	Intellectual	Intellectual
15	Polite	Clean	Forgiving
16	Imaginative	Imaginative	Obedient
17	Obedient	Loving	Logical
18. Least Important	Clean	Forgiving	Imaginative
Note: N = 181	n=53	n=34	n=94

Values ordered by mean score.

Table 8. Kruskal Wallace Test for Terminal Values Differences Between Groups

			Group	цро
Value	K/W Test	Students	Recruits	Soldiers
Comfortable Life	3.12	6	4	7
Equality	7.23 *	13	8	8
Exciting Life	5.75	12	9	15
Family Security	8.59 *	1	1	1
Freedom	1.18	4	3	3
Health	5.28	5	5	2
Inner Harmony	0.64	14	12	14
Mature Love	0.02	8	7	5
National Security	26.06 ***	15	2	11
Pleasure	0.40	10	14	12
Salvation	16.63 ***	2	10	10
Self Respect	3.17	7	6	4
Sense of	0.03	11	15	13
Social Recognition	1.68	16	17	18
True Friendship	17.78 ***	3	13	6
Wisdom	1.66	9	11	9
World Peace	1.16	18	16	16
World of Beauty	9.30 **	17	18	17

Notes: N = 191. n=53 n=38 n=100

Ranking based on mean score. Kruskal Wallace test used to test for significant differences between k indpendent samples.

^{*}p.<0.05 ** p. <0.01 ***p.<0.001

Table 9. Kruskal Wallace Test for Instrumental Values Differences Between Groups

			Group				
Value	K/W Test	Students	Recruits	Soldiers			
Ambitious	3.12	5	3	7			
Broad Minded	3.39	12	5	9			
Capable	1.45	9	9	6			
Clean	11.59 **	18	15	12			
Courageous	3.41	10	2	5			
Forgiving	5.56	7	18	15			
Helpful	0.37	13	11	13			
Honest	13.02 **	1	8	1			
Imaginative	1.30	16	16	18			
Independent	2.99	6	4	10			
Intellectual	2.98	8	14	14			
Logical	0.92	14	13	17			
Loving	12.14 **	3	17	4			
Loyal	1.87	4	1	3			
Obedient	9.07 *	17	10	16			
Polite	1.19	15	12	11			
Responsible	3.62	2	6	2			
Self Controlled	2.27	11	7	8			

Notes: N = 181. n=53 n=34 n=94

Ranking based on mean score. Kruskal Wallace test used to test for significant differences between k indpendent samples.

^{*}p.<0.05 ** p. <0.01 ***p.<0.001

Table 10. Mann Whitney Test for Two Groups Terminal Value Differences

Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) *** 7.08 (5.09) *** 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4 Salvation 5.79 (5.93) *** 9.47 (5.95) 9.8 Self Respect 7.85 (4.05) 8.24 (4.73) 6.8 Accomplish. 10.58 (4.42) 10.66 (4.43) 10.6 Social Recognition 13.13 (4.43) 12.29 (4.09) 13.0 True Friendship 6.11 (3.95) ***** 0.11 (4.83) 8.6 Wisdom 9.72 (4.75) 11.89 (4.74) 9.0 World Peace 13.40 (4.13) 11.89 (5.57) 12.9	0 (4.67)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) *** 7.08 (5.09) *** 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4 Salvation 5.79 (5.93) *** 9.47 (5.95) 9.8 Self Respect 7.85 (4.05) 8.24 (4.73) 6.8 Accomplish. 10.58 (4.42) 10.66 (4.43) 10.6 Social Recognition 13.13 (4.43) 12.29 (4.09) 13.0 True Friendship 6.11 (3.95) 0.11 (4.83) 8.6 Wisdom 9.72 (4.75) 11.89 (4.74) 9.0	
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) 7.08 (5.09) 7.08 (
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) 7.08 (5.09) 7.08 (5.09) 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4 Salvation 5.79 (5.93) 7.85 (4.05) 8.24 (4.73) 6.8 Accomplish. 10.58 (4.42) 10.66 (4.43) 10.6 Social Recognition 13.13 (4.43) 12.29 (4.09) 13.0	3 (4.02)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) 7.08 (5.09) 7.08 (5.09) 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4 Salvation 5.79 (5.93) 7.85 (4.05) 8.24 (4.73) 6.8 Accomplish. 10.58 (4.42) 10.66 (4.43) 10.6 Social Recognition 13.13 (4.43) 12.29 (4.09) 13.0	6 (4.55)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) 7.08 (5.09) 7.08 (08 (4.17)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) 7.08 (5.09) 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4 Salvation 5.79 (5.93) 9.8	66 (4.20)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) *** 7.08 (5.09) ** 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4	88 (4.23)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3 National Security 12.58 (3.90) 7.08 (5.09) 9.8 Pleasure 10.04 (4.13) 10.47 (4.88) 10.4	33 (6.09)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3	17 (4.88)
Mature Love 8.32 (4.74) 8.37 (5.08) 8.3	31 (4.90)
Inner Harmony 10.91 (4.26) 10.05 (4.87) 10.6	34 (4.53)
	39 (4.76)
Health 6.64 (4.27) 7.87 (3.86) 6.3	31 (4.43)
Freedom 6.25 (3.63) 7.16 (4.25) 6.3	35 (3.89)
Family Security 5.38 (4.29) 6.61 (4.57) ** 4.5	56 (4.57)
Exciting Life 10.74 (4.43) 8.63 (5.11) 10.8	88 (4.77)
Equality 10.89 (4.62) * 8.55 (4.45) 9.0	02 (4.23)
Comfortable Life 7.57 (4.84) 7.66 (4.85) 9.0	01 (5.39)
Value Students Recruits S	oldiers
Table 10. Mann Whitney Test for Two Groups Terminal Value Differences Group	

Mean score for each value, standard deviation shown in parentheses.

Mann Whitney test used pairwise on values found significant by Kruskal Wallace test.

Table 11. Mann Whitney Test for Two Groups Instrumental Value Differences

		Group	
Value	Students	Recruits	Soldiers
Ambitious	7.91 (5.40)	8.15 (4.62)	9.13 (4.74)
Broad Minded	10.38 (4.98)	8.50 (4.72)	9.20 (5.14)
Capable	9.43 (4.39)	9.91 (4.32)	8.87 (4.71)
Clean	13.55 (5.11)	10.71 (5.63)	10.29 (5.94)
Courageous	9.68 (5.69)	7.56 (4.60)	8.70 (4.56)
Forgiving	8.89 (5.19)	11.06 (5.62)	10.77 (4.90)
Helpful	10.77 (4.52)	10.06 (4.87)	10.30 (4.80)
Honest	5.47 (4.27)	9.06 (5.34)	5.50 (5.11)
maginative	11.94 (4.94)	10.97 (5.51)	12.31 (4.65)
ndependent	8.15 (4.82)	8.38 (4.48)	9.48 (4.90)
ntellectual	9.34 (4.70)	10.65 (5.44)	10.67 (4.76)
_ogical	10.85 (4.76)	10.62 (5.57)	11.51 (4.99)
oving	6.70 (4.51)	11.00 (5.70)	8.60 (5.43)
.oyal	6.89 (4.49)	6.35 (4.93)	7.74 (5.40)
Obedient	13.34 (3.98)	9.94 (5.37)	11.37 (5.00)
Polite	11.08 (4.37)	10.32 (4.42)	10.17 (4.91)
Responsible	6.38 (3.86)	8.79 (5.50)	7.21 (4.60)
Self Controlled	10.26 (4.71)	8.97 (4.68)	9.18 (4.50)
lote: N = 181.	n=53	n=34	n=94

Mean score for each value, standard deviation shown in parentheses.

Mann Whitney test used pairwise on values found significant by Kruskal Wallace test.

Table 12. OLS Regression Coefficients on Equality

			Grou	р		
	Students		Recrui	its	Soldier	S
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		38		10	0
adj. R2	0.169	0.955	0.013	0.991	0.071	0.923
ANOVA F	2.482 *		1.067		1.699	
constant	-2.738 **	0.915	0.406	0.835	-0.532	0.526
Variables						
ethnicity	0.797 *	0.304	0.341	0.378	0.431	0.225
longest res.	0.160	0.116	0.040	0.108	0.049	0.062
mother milt.	0.446	1.021	-0.388	0.463	-0.696	0.435
mother educ.	0.211	0.172	-0.361	0.159	0.203	0.110
father milt.	0.370	0.282	-0.055	0.360	-0.334	0.205
father educ.	0.007	0.169	0.158	0.172	-0.095	0.089
relg. freq.	0.158	0.094	0.015	0.119	0.062	0.063
milt. serv.					-0.001	0.002
combat expr.					-0.221	0.223
married					0.208	0.250

Note: *p.<0.05 ** p. <0.01 ***p.<0.001 (two tailed test)

Table 13. OLS Regression Coefficients on Family Security

			Grou	р		
	Students	S	Recrui	its	Soldiers	5
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						,
n =	53		38		100)
adj. R2	0.052	0.882	-0.113	1.073	0.097	0.942
ANOVA F	1.402		0.477		1.991 *	
constant	0.009	0.846	-0.966	0.904	0.375	0.537
Variables						
ethnicity	0.202	0.281	-0.002	0.409	-0.456	0.230
longest res.	-0.119	0.107	0.118	0.117	-0.053	0.064
mother milt.	-1.628	0.944	-0.584	0.501	0.288	0.444
mother educ.	0.170	0.159	-0.095	0.172	-0.057	0.112
father milt.	0.317	0.260	0.433	0.389	-0.310	0.209
father educ.	-0.120	0.156	0.050	0.186	0.031	0.091
relg. freq.	0.210 *	0.087	-0.010	0.128	0.045	0.065
milt. serv.					-0.001	0.002
combat expr.					0.311	0.227
married					0.626 *	0.255

Table 14. OLS Regression Coefficients on National Security

			Group			
	Student	S	Recruits	S	Soldiers	
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		38		100	
adj. R2	-0.060	0.806	0.336	0.824	0.140	0.885
ANOVA F	0.568		3.598 **		2.499 *	
constant	-0.613	0.773	0.594	0.696	0.038	0.504
Variables						
ethnicity	-0.324	0.257	-0.914 **	0.314	-0.087	0.216
longest res.	-0.001	0.098	-0.147	0.090	-0.033	0.060
mother milt.	-0.672	0.862	0.085	0.385	-0.278	0.417
mother educ.	0.190	0.145	0.226	0.132	-0.051	0.105
father milt.	0.236	0.238	-0.345	0.299	0.203	0.196
father educ.	-0.144	0.143	0.257	0.143	-0.161	0.085
relg. freq.	0.002	0.079	0.052	0.099	0.199 **	0.061
milt. serv.					-0.001	0.002
combat expr.					0.047	0.214
married					0.487 *	0.239

Note: *p.<0.05 ** p. <0.01 ****p.<0.001 (two tailed test)

Table 15. OLS Regression Coefficients on Salvation

			Group			
	Students		Recruits	Recruits		
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		38		100	
adj. R2	-0.033	0.973	0.494	0.687	0.179	0.906
ANOVA F	0.766		6.018 ***		3.010 **	
constant	-0.195	0.933	0.357	0.579	-1.36 *	0.516
Variables						
ethnicity	-0.181	0.310	0.514 *	0.262	-0.232	0.221
longest res.	0.001	0.118	-0.161 **	0.075	-0.005	0.061
mother milt.	0.008	1.410	-1.077	0.321	0.623	0.427
mother educ.	0.124	0.175	-0.165	0.110	0.188	0.108
father milt.	-0.005	0.287	-0.015	0.249	0.055	0.201
father educ.	0.001	0.172	-0.098	0.119	0.015	0.087
relg. freq.	0.187	0.096	0.422 ***	0.082	0.243 ***	0.062
milt. serv.					-0.001	0.002
combat expr.	•				0.088	0.219
married					0.440	0.245

Table 16. OLS Regression Coefficients on True Friendship

			Group)		
	Students	3	Recruit	is	Soldiers	
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary			-			
n =	53		38		100	
adj. R2	0.038	0.841	0.050	1.010	0.070	0.934
ANOVA F	1.290		1.270		1.694	
constant	1.291	0.806	0.279	0.852	-0.054	0.532
Variables						
ethnicity	-0.561 *	0.268	-0.099	0.385	0.021	0.228
longest res.	-0.009	0.102	0.104	0.110	0.064	0.063
mother milt.	0.305	0.899	-0.139	0.472	-0.424	0.440
mother educ.	0.002	0.152	-0.017	0.162	-0.008	0.111
father milt.	0.393	0.248	-0.332	0.367	0.065	0.207
father educ.	-0.003	0.149	-0.413 *	0.175	-0.186 *	0.090
relg. freq.	-0.008	0.083	-0.046	0.121	0.093	0.064
milt. serv.					0.001	0.002
combat expr.					-0.678 **	0.225
married					-0.002	0.253

Note: *p.<0.05 ** p. <0.01 ***p.<0.001 (two tailed test)

Table 17. OLS Regression Coefficients on Clean

			Grou	р		
	Students		Recrui	Recruits		;
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		36		94	
adj. R2	0.149	0.770	-0.197	1.027	0.168	0.937
ANOVA F	2.277 *		0.247		2.738 **	
constant	-0.863	0.733	0.483	0.897	0.085	0.556
Variables						
ethnicity	0.153	0.245	-0.271	0.413	0.619 *	0.244
longest res.	0.151	0.090	-0.008	0.115	-0.048	0.067
mother milt.	1.602	0.824	0.033	0.509	0.719	0.420
mother educ.	0.001	0.140	-0.019	0.164	-0.092	0.115
father milt.	-0.692 **	0.226	-0.467	0.405	0.102	0.216
father educ.	-0.200	0.139	-0.043	0.176	0.235 *	0.091
relg. freq.	-0.008	0.076	-0.007	0.133	-0.118	0.067
milt. serv.					-0.003	0.002
combat expr.					0.380	0.234
married					0.139	0.261

Table 18. OLS Regression Coefficients on Honest

			Group)		
	Student	ts	Recruit	s	Soldiers	3
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		36		94	
adj. R2	0.080	0.811	0.083	0.983	0.031	0.959
ANOVA F	1.630		1.411		1.278	
constant	-0.009	0.771	-0.725	0.856	-0.589	0.569
Variables						
ethnicity	-0.001	0.258	0.548	0.396	-0.498 *	0.249
longest res.	-0.009	0.098	-0.087	0.110	0.108	0.068
mother milt.	0.262	0.867	-0.117	0.488	0.811	0.430
mother educ.	0.010	0.147	0.035	0.157	0.040	0.112
father milt.	0.263	0.238	0.395	0.388	-0.301	0.221
father educ.	0.242	0.146	-0.060	0.169	0.050	0.093
relg. freq.	0.135	0.080	0.337 *	0.127	0.013	0.069
milt. serv.					-0.001	0.002
combat expr.					-0.222	0.240
married					0.298	0.267

Note: *p.<0.05 ** p. <0.01 ***p.<0.001 (two tailed test)

Table 19. OLS Regression Coefficients on Loving

			Grou	р		
	Students	3	Recrui	ts	Soldier	S
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		36		94	
adj. R2	0.172	0.752	-0.077	1.086	0.024	1.001
ANOVA F	2.515 *		0.673		1.211	
constant	0.278	0.715	-1.849	0.949	0.521	0.594
Variables						
ethnicity	-0.284		0.367	0.437	0.269	0.260
longest res.	-0.011		0.166	0.122	-0.096	0.071
mother milt.	-0.044		0.219	0.529	-0.251	0.448
mother educ.	-0.175		0.209	0.173	0.059	0.123
father milt.	0.643 **		0.287	0.429	0.038	0.231
father educ.	0.009		-0.083	0.187	0.138	0.097
relg. freq.	0.090		-0.091	0.140	-0.102	0.072
milt. serv.					-0.003	0.002
combat expr.					-0.130	0.250
married					-0.064	0.279

Table 20. OLS Regression Coefficients on Obedient

<u> </u>			Group)		
	Students		Recruit	S	Soldiers	
Model 1	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Model Summary						
n =	53		36		94	
adj. R2	0.005	0.813	0.060	1.065	-0.066	1.061
ANOVA F	1.038		1.293		0.467	
constant	-1.620 *	0.774	1.983 *	0.931	-0.176	0.629
Variables						
ethnicity	-0.026	0.259	0.026	0.429	0.272	0.276
longest res.	0.093	0.099	-0.283 *	0.120	-0.018	0.075
mother milt.	-1.554	0.870	0.002	0.529	-0.531	0.475
mother educ.	0.127	0.148	-0.050	0.170	0.074	0.130
father milt.	0.385	0.239	-0.460	0.421	0.239	0.245
father educ.	0.041	0.147	0.049	0.183	-0.042	0.103
relg. freq.	0.074	0.080	0.188	0.138	0.022	0.076
milt. serv.					-0.027	0.002
combat expr.					0.184	0.265
married					0.015	0.296

VITA

Background

Scott Lawrence Efflandt of Rock Island, Illinois, graduated from Alleman High School in 1983. That summer Scott reported to the Army's Reserve Officer Training Corps and subsequently attended Marion Military Institute in Alabama. Scott married the former Ann Marie Pycz in October 1987 following his college graduation. He reported to active duty in October 1987 and continues to serve as an officer in the US Army today.

Address Through 2000

Major Efflandt
Department of the Army
United States Army Military Academy
Behavioral Science and Leadership Department
Building 601
West Point, NY 10996

Educational Background

Bachelor of Science: Administration of Justice, from Southern Illinois University, 1987.

Professional Experience

Scott Lawrence Efflandt has held a variety of assignments ranging from service in the Illinois Army National Guard to staff and command postings in the active component.